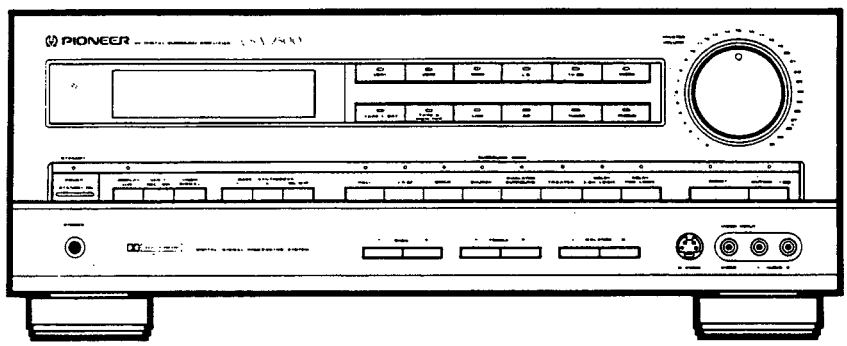
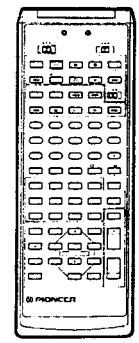
Operating Instructions

AV DIGITAL SURROUND AMPLIFIER

VSA-7500





Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT NOTICE

[For U.S. and Canadian models]

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

[For Canadian models]

CAUTION:

TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED)PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION:

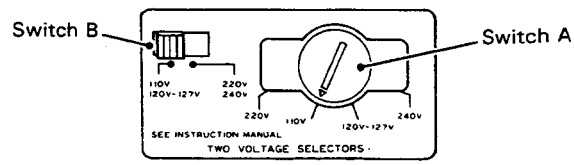
POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

TWO VOLTAGE SELECTOR SWITCHES

Only multi voltage models are provided with these switches. U.S., Canadian, U.K., Australian and Europe models are not provided with them.
Mains voltages in Saudi Arabia are 127V and 220V only. Never use this model set to 110V in Saudi Arabia.
You will find the line voltage selector switches on the rear panel. Before your model is shipped from the factory, the switches are set to the power requirements of the destination. Nevertheless, you should check that they are set properly before plugging the power cord into the wall outlet. If the voltage requirements differ, adjust the selector switches as follows. Before adjusting, disconnect the power cord.

1. Provide yourself with a medium size screwdriver.
2. Changing the position of switch A, B.
   Insert the screwdriver into the slot on the voltage selector and adjust so that the tip of the slot points to the voltage value of your area.
   Changing the position of switch A, B.
   Set it to the power voltage of your area.

NOTE:
Both switches A and B must be in the same voltage.



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The Art of Entertainment

IMPORTANT

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

SAFETY INSTRUCTIONS

READ INSTRUCTIONS – All the safety and operating instructions should be read before the appliance is operated.
RETAIN INSTRUCTIONS – The operating instructions should be retained for future reference.
HEED WARNING – All warnings on the appliance and in the operating instructions should be adhered to.
FOLLOW INSTRUCTIONS – All operating and use instructions should be followed.
WATER AND MOISTURE – The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
LOCATION – The appliance should be installed in a stable location.
WALL OR CEILING MOUNTING – The appliance should not be mounted to a wall or ceiling.
VENTILATION – The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
HEAT – The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
POWER SOURCES – The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
POWER-CORD PROTECTION – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
POLARIZATION – If your purchased product is provided with a polarized power plug, please read the following instructions. This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
CLEANING – The appliance should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

POWER LINES – An outdoor antenna should be located away from power lines.
NONUSE PERIODS – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
OBJECT AND LIQUID ENTRY – Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
DAMAGE REQUIRING SERVICE – The appliance should be serviced by a Pioneer authorized service center or qualified service personnel when:
- The power-supply cord or the plug has been damaged.
- Objects have fallen, or liquid has been spilled into the appliance.
- The appliance has been exposed to rain.
- The appliance does not appear to operate normally or exhibits a marked change in performance.
- The appliance has been dropped or the enclosure damaged.

SERVICING – The user should not attempt to service the appliance beyond that described in the operating instructions. For all other servicing, contact the nearest Pioneer authorized service center.

OUTDOOR ANTENNA GROUNDING – If an outside antenna is connected to the antenna terminal, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.
In the U.S.A. section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Fig. A.
CART – An appliance and cart combination should be moved with care. Quick stops, excessive forte, and uneven surfaces may cause the appliance and cart combination to overturn.

NEC – NATIONAL ELECTRIC CODE

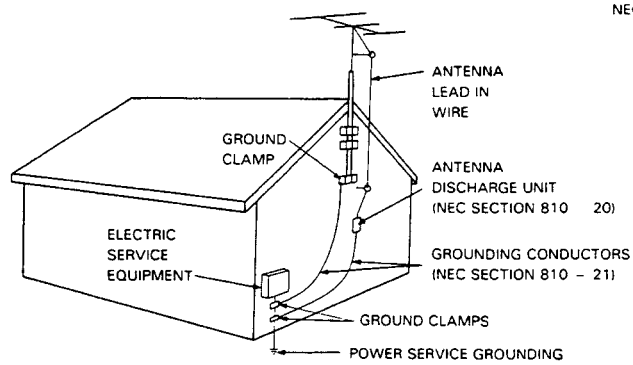

FIG. A

INFORMATION TO USER [FOR U.S. MODEL]

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- reorient the receiving antenna
- relocate this equipment with respect to the receiver
- move this equipment away from the receiver
- plug this equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:
"How to Identify and Resolve Radio-TV Interference Problems"
This booklet is available from the US Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.

The above instructions apply only to units which will be operated in the United States.

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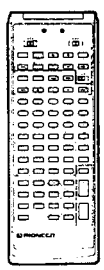
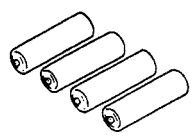
BEFORE USING

• Check Accessories

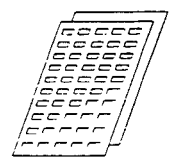
■ Remote control unit x 1



■ Size AAA alkaline dry-cell batteries LR03(AM-4) x 4



■ Template x 2



POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

FEATURES

■ Five-Power Amplifier System With Built-in Dolby Pro Logic Surround Circuit

Full-fledged surround playback creating a sense of true presence and expansiveness can be enjoyed.
Six types of surround effect can be switched to by digital signal processor (DSP)

■ Auto Input Balance Control

During Dolby Surround playback, input balance with respect to the input source is controlled automatically in this system. It can also make allowances for errors in level which could not be corrected by the conventional manual balance control, and suppress any increases in crosstalk.

■ High Power

Front 70W+70W (1kHz, 0.3%, 8Ω)
Center 70W (1kHz, 0.3%, 8Ω)
Rear 23W+23W (1kHz, 5%, 8Ω)

■ Centralized Control by AV Programmable Remote Control Unit

When other units are combined with Pioneer products having the mark, both audio equipment and video equipment can be manipulated with one accessory remote control unit. Moreover, a learning function has been added which makes it possible to control an AV surround system that includes television and video cassette recorders by other makers. (There are cases in which learning cannot be done with remote controls by some makers.)

> ■ Even though the Pioneer remote control has the button for a particular function, if your unit does not have that function or if it is one which your unit does not accommodate by remote control, then it cannot be operated by the Pioneer remote control.

■ Function Backup

With the conventional AV amplifier, when the power is turned OFF, all REC OUT is shut off and the main unit power supply must be turned ON deliberately for recording while absent. In this unit, sound and image recording can easily be implemented while one is absent because the final REC OUT status is held, even when the power supply is OFF (STANDBY OFF) by the unit's function backup.
(See page 9.)

■ Center Speaker Terminals Enable Connection of Two Systems

Since there are center speaker terminals for two systems, two speakers can be arranged in a dual center format.

■ Emphasis on Sound Quality

Direct Construction:
The signal route has been shortened to the minimum so that input of excess noise is reduced as much as possible.
Honeycomb Chassis, Honeycomb Heat Sink:
Received vibrations are scattered outward to prevent deterioration of sound quality due to vibrations or resonance.
All Source Direct Function:
Direct switches can accommodate all sources so that the source sound is reproduced as faithfully as possible without passing through sound quality adjustment circuits.

■ Extensive AV Input Terminals Attached

■ **Audio system:**
TAPE1/DAT, TAPE2(MONITOR), LINE, CD, TUNER, PHONO
■ **Video system:**
VCR1, VCR2, VCR3, LD, TV/BS, VIDEO
S terminals are attached to all input and output.

■ Video Signal Selector

Various combinations of audio and video can be freely enjoyed.

■ Alternate Video Cassette Recorder (VCR) Copy is Possible

Copying can be done from VCR1 to VCR2 and vice versa.

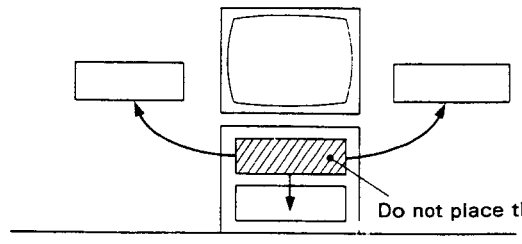
■ Recording Selector to VCR1

Recording can be made from VCR2, VCR3, LD, TV/BS, or VIDEO to VCR1 irrespective of the input selector.

HANDLING PRECAUTIONS

• Installation

- Install unit in a well-ventilated location where it will not be exposed to high temperatures and high humidity.
  Do not place the unit near stoves or other heating equipment or at locations exposed to direct sunlight, as these can have an adverse effect on the cabinet and internal components. Also, do not install the unit where there is much dust or high humidity, as these can cause malfunctioning or breakdown. (Avoid cooking tables and other locations where the unit would be exposed to heat, steam and soot.)
- Do not place other AV equipment on top of the unit, as this can block discharge of heat.
- If the unit is placed directly below a television as shown in the illustration below, it may be affected by the television and produce noise. Either separate the unit further from the television or place the unit at the side of the television.



SURROUND EFFECT

This unit has a surround processor built in for creating sounds that give a sense of presence and spaciousness.
Select any of the following 8 surround effects in accordance with the sound for maximum enjoyment.

Theater
Appropriate for enjoying stereo movie (sound) sources not having the DOLBY SURROUND mark.
Moreover, this unit has a Dolby Surround Processor built in to create sound effects with a sense of true presence and expansiveness.

Simulated Surround
This mode is used for a monaural sound source. It allows you to enjoy an ever-broadening sense of true presence. This mode can also be used with stereo sound sources.

Church
This mode reproduces church music with the full dignity of the pipe organ. It is also ideal for baroque music.

Disco
Loud commotion and strong reflected sounds heighten the sense of true presence with this mode.

Jazz
This mode provides the enjoyment of a Jazz club or other house of live performances.

Hall
From a small orchestra to a large orchestra, the sound effect appropriate to the size of the concert hall can be enjoyed.
This mode is especially suited for classical music, etc.

TWO MODES BY DOLBY SURROUND

Dolby Pro Logic Surround
Select this mode for movie and music sound sources (especially movies with the DOLBY SURROUND mark). The illusion of being in a viewer's seat at a theater or concert hall is created by Dolby Surround for enjoyment of full effects. Dolby Pro Logic Surround is outstanding for reproducing the sense of sound from a stationary or moving source. It lets you enjoy the sense of true presence in a vast hall of sound.

Dolby 3-Channel Logic
This mode enables you to enjoy reproduced sound with a greater sense of true presence and expansiveness than you get from regular stereo, with three front channels (front R and L speakers and center speaker) obtained by adding the rear speaker signals to the front speakers. This mode is used when the rear speaker has not been connected.

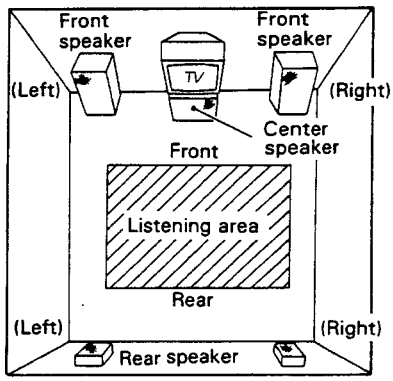
Listening Room
The full effect of this unit cannot be obtained in a room with a lot of sound reflection. In the case of such rooms, the following countermeasures are recommended.
- In Western style rooms, for instance, where sound reflection and resonance can occur easily, use thick curtains and change the arrangement of the furniture.
- If the room is surrounded by hard walls or glass doors, etc., take measures for sound absorption. For example, apply thick curtains for preventing reflection and the generation of stationary waves.

Manufactured under license from Dolby Laboratories Licensing Corporation.
DOLBY and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

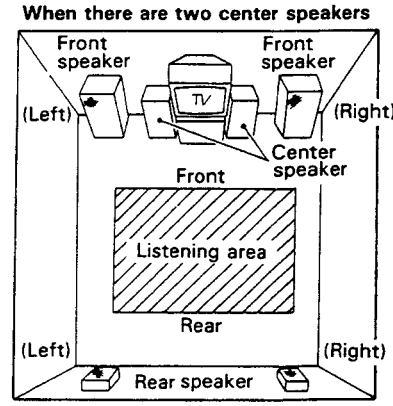
SURROUND EFFECT

Install the speakers as shown in the illustration for achieving maximum surround effect.

When there is one center speaker



When there are two center speakers



- **When center speaker is not used with Dolby Surround** ···
Set center mode to PHANTOM position with remote control CENTER MODE button.
- **When the rear speaker is located very far from the unit** ···
Please note that the surround level can no longer be adjusted and that adequate surround effect cannot be obtained.

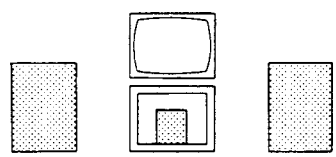
NOTE:
- *Be sure to use a magnetically shielded speaker if it is to be placed near a television.*
- *Install the right and left speakers so they are equidistant from the television.*
- *It is more effect to install the rear speaker slightly higher than the ear level.*

• Concerning Center Mode

With Dolby Pro Logic Surround the following three positions have been prepared as center mode. Use the center mode button on the remote control to change this mode.

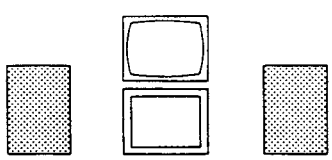
NORMAL

When a small-scale speaker (one which cannot play back bass sounds of 100 Hz or less) is used for center channel playback.



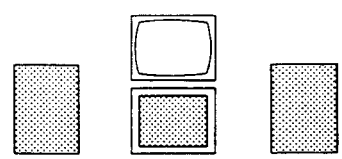
PHANTOM

When the center speaker(s) is not used.



WIDE

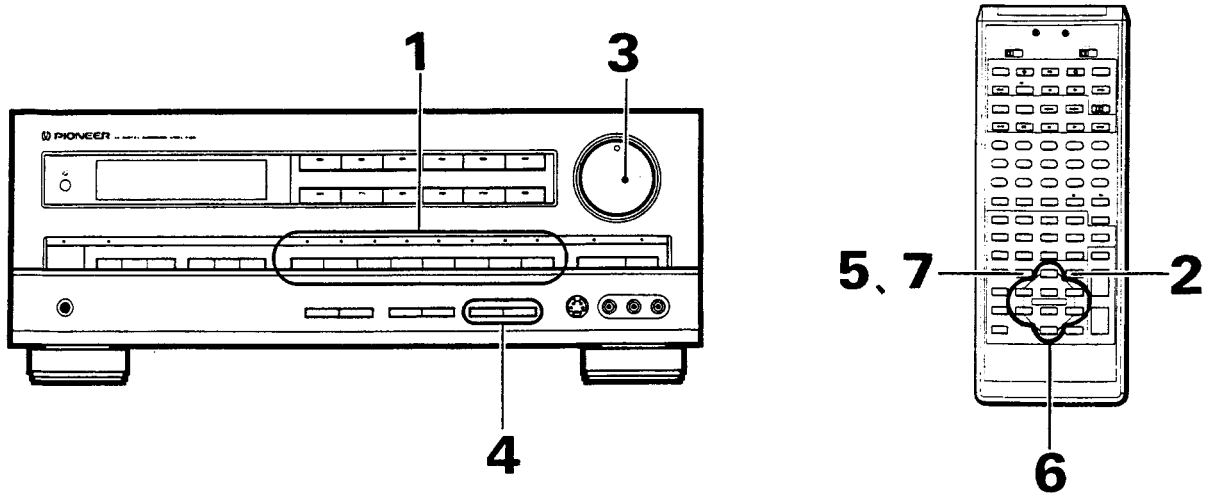
When the same type of speaker is used at left and right of the front for center channel playback.



NOTE:
- *Do not place the television directly on top of the speaker.*

SURROUND LEVEL ADJUSTMENT METHOD

Always perform this adjustment for proper surround playback.



1 **Select the desired surround mode with the surround mode button.**

2 **Select the center mode (NORMAL, WIDE, PHANTOM) with the center mode button. (Center mode works only with Dolby Pro Logic and Dolby 3CH.)**

3 **With the master volume control, set the sound volume for regular listening level.**

4 **Press the left (L) and right (R) balance buttons simultaneously and set for center balanced condition.**
(In the case of remote control, use the surround button to balance the right and left sides with respect to the center. (See page 30.))

5 **Turn the test tone button to ON.**

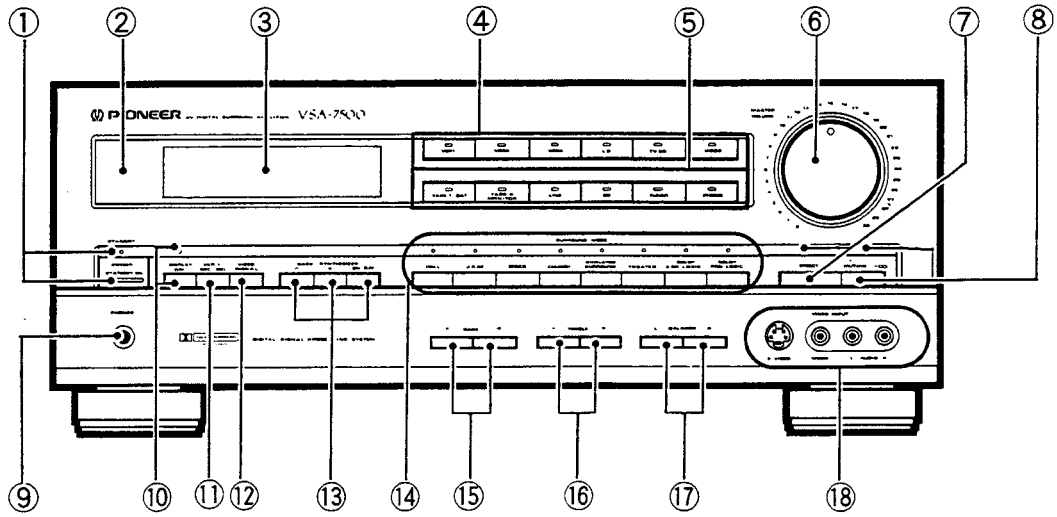
6 **While listening to the test tone, adjust the sound volume from each speaker with the remote control surround button so that these volumes are all the same. (See page 30.)**

7 **Press the test tone button once again to turn it OFF.**

Cautions regarding test tone
- *With Dolby 3ch Logic, there is no sound from the rear speaker.*
- *When the center mode is PHANTOM, there is no sound from the center speaker.*

PANEL FACILITIES

• FRONT PANEL



① POWER STANDBY/ON switch / STANDBY indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain opetation readiness.

- The indicator lights when the unit is in the standby mode.
- The accessory remote control unit can also be used to operate STANDBY/ON function of this switch.
- When not using the unit for a long period, disconnect the power cord.
- In standby condition, the last sources to be selected on the audio system (excluding PHONO) and the video system (excluding items connected to S terminal) are maintained. For this reason, absentee sound recording or absentee video recording can be executed with the power supply in standby condition.

② Remote control sensor

③ Display

Please see page 12.

④ Video input selector

Selects the video unit for playback. The indicator lights up red.

VCR1: Press for playback of the VCR connected to the VCR1 terminal.

VCR2: Press for playback of the VCR connected to the VCR2 terminal.

VCR3: Press for playback of the VCR connected to the VCR3 terminal.

LD: Press for disc playback with CD, CDV, LD player connected to LD terminal.

TV/BS: Press for watching broadcasts with TV tuner or BS tuner.

VIDEO: Press for playback of unit (i.e.,TV camera) connected to VIDEO INPUT terminal on front panel.

⑤ Audio Input Selector

Selects the audio unit for playback. The indicator lights up red.

TAPE1/DAT: Press for playback of tape with DAT or cassette deck connected to TAPE1/DAT terminal.

TAPE2 MONITOR: Press for playback of tape with DAT or cassette deck connected to TAPE2 terminal. Press once again to turn to OFF.

LINE: Press for using an audio unit connected to the LINE terminal.

CD: Press for CD playback with a CD player connected to the CD terminal.

TUNER: Press for listening to AM or FM broadcast with tuner connected to TUNER terminal.

PHONO: Press for playback of records on turntable connected to PHONO terminal.

⑥ MASTER VOLUME

In adjusting the sound volume with this knob, the front, rear and center change simultaneously. Moreover, output from PRE OUT terminal, the CENTER AMPLIFIER OUT terminal and the SUPER WOOFER OUT terminal, all on the rear panel, changes simultaneously.

⑦ DIRECT Button/Indicator

Press this button ON (indicator lights up) to hear the source sound without passing through a sound quality adjustment circuit or balance adjustment circuit. In order to enjoy better sound quality at the front, do not use Surround, Tone Control (Bass,Treble), Balance or Bass Synthesizer.

When the DIRECT button is ON, if you press an operation button which does not function, the DIRECT indicator blinks to give notice.

⑧ MUTING Button/Indicator

Press this button to extinguish the sound volume temporarily. At this time the muting indicator blinks. When pressed again, the original sound volume is restored.

⑨ Headphones terminal (PHONES)

Connect the headphones plug to this terminal.

⑩ DISPLAY OFF Button/Indicator

When this button is pressed, the display extinguishes and the DISPLAY OFF indicator lights up. This stops operation of circuits not in use and prevents adverse effects on sound quality.
Press the button again and the display lights up again.
If another operation button is pressed while the display is extinguished, the display lights up for several seconds.

⑪ VCR1 REC SEL (SELECTOR) Button

Selects unit for video recording to VCR1 other than unit selected with video input selector.
Each time this button is pressed, the unit video recording to VCR1 is switched over in the following sequence.

VCR2 → VCR3 → LD → TV/BS → VIDEO → (no display) → VCR2

For example, TV/BS video recording at VCR1 can be executed while watching LD.
(The video input selector is set to LD and the VCR1 recording selector is set to TV/BS.)
See page 25 for operating procedure.

NOTE:
Do not select VCR1 with the video input selector.

⑫ VIDEO SIGNAL Button

Enables you to change the video alone to another source without changing the audio portion. For example, you can listen to the sound from an LD while watching the video from VCR1. When this button is pressed, the screen changes in the sequence given below, and each input selector indicator lights up as orange.
〈When source is selected with audio input selector〉

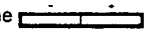
VCR1 → VCR2 → VCR3 → LD → TV/BS → OFF ← VIDEO → VCR1

〈When source is selected with video input selector〉

VCR1 → VCR2 → VCR3 → LD → VIDEO ← TV/BS → VCR1

The orange indicators show the video source and the red indicators show the audio source.

⑬ BASS SYNTHESIZER Buttons

Use this button when you want to magnify heavy bass sounds and playback powerful music pieces. It produces a dynamic effect for scenes of battles or explosions in movies. Press the bass synthesizer button to ON and the level can be adjusted in increments of 10 from 0 to 100 with the  button.

⑭ SURROUND MODE Buttons/Indicators

Selects the surround mode matching the playback source for surround playback.
The indicator of the selected mode lights up.
It goes OFF when pressed once again.

⑮ BASS Buttons

Adjusts sound quality in the low range. Press the + side to magnify low sounds and the − side to diminish these sounds. If the + and − are pressed simultaneously, the front alone become flat.

⑯ TREBLE Buttons

Adjusts sound quality in the high range. Press the + side to magnify high sounds and the − side to diminish these sounds. If + and − are pressed simultaneously, the front alone becomes flat.

⑰ BALANCE Button

Adjusts the balance of sound at right and left.
L ····· Press when sound at the left is lower than at the right.
R ····· Press when sound at the right is lower than at the left.
If L and R are pressed simultaneously, no adjustment takes place.
When the surround button of the remote control is used, the front and rear can be adjusted separately.

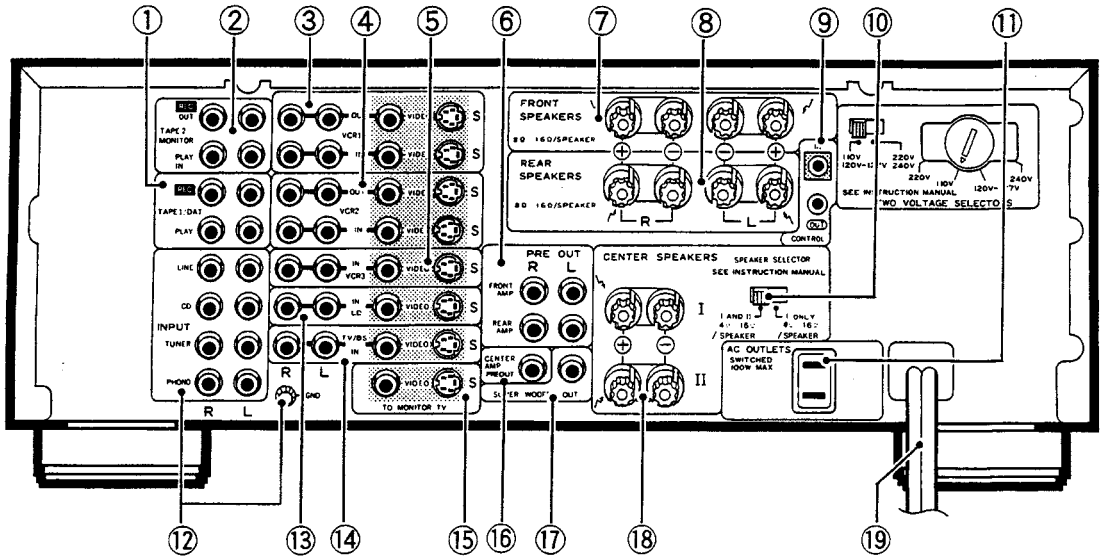
⑱ VIDEO INPUT Terminal

This terminal connects TV camera or other video unit. If the monitor TV has an S terminal and it is connected to the S output terminal of this unit, the S input terminal can also be used.

NOTE:

- *For playback of audio or video units other than those connected to TAPE2 terminal, set the TAPE2 MONITOR button to OFF (TAPE2 indicator extinguishes).*
  When the TAPE2 MONITOR button is at ON, there is no sound.
  If another function button is pressed while the TAPE2 MONITOR button is ON, the TAPE2 MONITOR indicator and the TAPE2 indicator on the display blink to give notice that the other functions cannot be executed.
  If the power supply switch (POWER) is pressed while the power supply is in standby condition, the listening status before the power supply was put in standby mode is restored. (Last memory function)
  The last memory function remains effective for several days even if the power cord is removed or there is a power failure.
- *If buttons which do not function at time of DIRECT condition are pressed while DIRECT is at ON, the indicator blink to give notice.*
- *If the surround mode button is pressed while DIRECT is at ON, DIRECT goes OFF.*
- *The effect of the bass synthesize may be excessive, depending on the source of playback, so be careful not to raise the level too high.*

REAR PANEL



① TAPE1/DAT Terminals

REC:
Can be connected to the record input terminals of the first cassette deck or the digital audio tape deck.
PLAY:
Can be connected to the playback output terminals of the first cassette deck or the digital audio tape deck.

NOTE:
For connection of the digital audio tape deck, connect to analog input/output terminals.

② TAPE2 MONITOR Terminals

REC:
Can be connected to the record input terminals of the second cassette deck.
PLAY:
Can be connected to the playback output terminals of the second cassette deck.

③ VCR1 Terminals

IN:
Can be connected to the playback output (video, audio) terminals of the first VCR.
OUT:
Can be connected to the video record (video, audio) input terminals of the first VCR.

- For a VCR having a S video input/output terminal, the S terminal can also be connected.
- If audio output of the VCR is monaural, use a stereo--monaural cord sold on the market.

④ VCR2 Terminals

Used to connect with the second VCR.
Connection is made in the same way as with the first VCR (except for S terminal connection).

⑤ VCR3 Input Terminals

Can be connected to playback terminals of the third VCR.

⑥ PRE OUT Terminals

This terminal is used when a separate power amplifier is employed for power amplification.
FRONT AMP: for front L, R
REAR AMP: for rear L, R

> If a separate amplifier has been connected to the PRE OUT terminal, do not connect a speaker to the speaker terminal of this unit.

⑦ FRONT SPEAKERS Terminals

The right and left speakers at the front are connected through these terminals.
Use speakers with an impedance of 8 to 16 ohms.

⑧ REAR SPEAKERS Terminals

The right and left speakers at the rear are connected through these terminals.

⑨ CONTROL IN/OUT Terminals

These terminals are for input or output of control signals for centralized remote control of various units by the remote control component provided with this unit. (For details, see page 27.)

⑩ CENTER SPEAKER SELECTOR Switch

This switch changes the speaker impedance for when only one center speaker is connected, or two speakers are connected.
When one speaker only is connected:
Be sure to set the switch to "I ONLY" (right side), and always connect a speaker with impedance of 8 to 16 ohms to the I terminal.
When two speakers are connected:
Be sure to set the switch to "I AND II" (left side), and always use speakers with an impedance of 4 to 16 ohms.

NOTE:
Switch the SPEAKER SELECTOR when the unit power supply is at STANDBY. Do not switch the selector when the power supply is at ON.

If a speaker is connected to II terminal, but the speaker selector switch is at the "I AND II" position, there will be no sound.

⑪ AC OUTLETS

SWITCHED TOTAL 100W MAX

For a second unit is connected in linkage with the setting (ON-STANDBY (OFF)) of the power supply switch (STANDBY/ON) for this unit, the power supply to that unit can be set to ON-OFF (the power supply switch of second unit is set at ON).
Set so that the total power consumption does not exceed 100W.

Power Consumption of Power Supply Outlet

- Never connect an electrical unit (i.e., toaster, drier) whose power consumption exceeds the value of W shown on the panel. Otherwise, there is the danger of breakdowns and fire.
- Do not connect television sets. Even if the power consumption of a TV set is less than the allowance value, when the power is connected, there can be huge surges of current which exceed the allowance value.

⑫ AUDIO INPUT Terminals

- **LINE**

Can be connected to output terminal of audio unit.

- **CD**

Can be connected to output terminal of compact disc player.

- **TUNER**

Can be connected to output terminal of FM/AM tuner.

- **PHONO/GND**

Record player output cord can be connected to this terminal.
An Earth wire is connected to the GND terminal.
Use a moving magnet (MM) type cartridge with the turntable.

⑬ LD Terminals

This terminal is connected to the output (video, audio) terminal of CD, CDV, LD player.

- In the case of a CD, CDV, LD player with S video output terminal, the S terminal can also be connected.

⑭ TV/BS Terminals

Connected to output (video, audio) terminal of BS tuner or TV tuner.

- In the case of a tuner with S video output, the S terminal can also be connected.

⑮ TO MONITOR TV Terminals

Connected to the video input terminal of monitor TV.
Only signals input from S terminal are output by the S terminal of the monitor TV. Consequently, nothing can be output unless the S input terminal of LD, VCR1, 2, 3, TV/BS, or VIDEO INPUT (front panel) has been connected.

⑯ CENTER AMP PREOUT Terminal

This terminal is used when a separate power amplifier is employed to amplify power at the front center.

⑰ SUPER WOOFER OUT Terminal

This terminal is used to connect a center woofer power amplifier when you want to strengthen the bass region of the center channel or you want to use a 3D system.
The frequency characteristic of this channel is cut by a characteristic of 6dB/oct at about 100Hz or above.

⑱ CENTER SPEAKERS Terminals

Connects center speakers for Dolby Pro Logic Surround and Dolby 3CH Logic. Since two systems can be connected, a center speaker can be placed at each side of a TV and used as dual center (see page 18).
When the speaker selector is at "I ONLY," use a speaker with impedance of 8 to 16 ohms. When the speaker selector is at "I AND II," use speakers with impedance ranging from 4 to 16 ohms each.

⑲ POWER Cord

NOTE:

- *In this unit, S terminal (Y-C separation) and pin jack video terminal are independent from each other, so signals input from pin jack are output from pin jack and signals input from S terminal are output from S terminal.*

····· Composite system terminal

····· S terminal

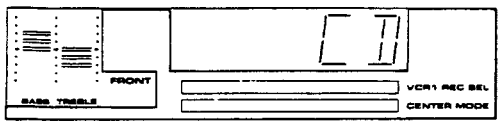
• Concerning 3D System

3D is an abbreviation of "three dimensional" in the three dimensional stereo system. This system is a stereo 2-channel with an additional channel that magnifies and reproduces excessively low sounds. The format makes use of the fact that the human ear loses almost all sense of direction with frequencies of long wavelength at 100 Hz or below; the low sound components of right and left are synthesized as one channel, and the speaker for playback of ultra-low sounds is driven by a special-purpose amplifier. This scheme is also called the center woofer format. Its distinguishing characteristic is that it handles super woofer, which tends to become large-scale, with one channel.

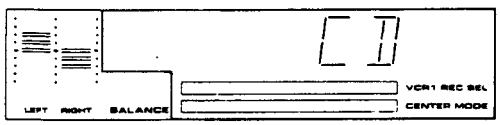
DISPLAY COMPONENT

- **The following various settings are shown on the display component.**

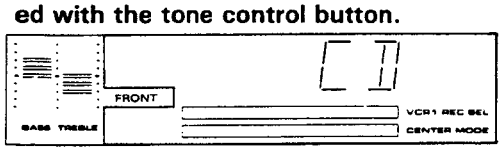
① Normally shows unit selected with input selector or front tone status, etc.



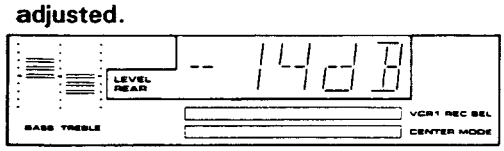
② Display when the balance of right and left sounds is being adjusted with the balance button.



③ Display when the treble and bass are being adjusted with the tone control button.

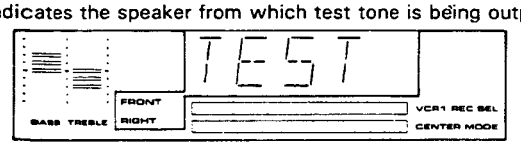


④ Display when the rear and center levels are being adjusted.

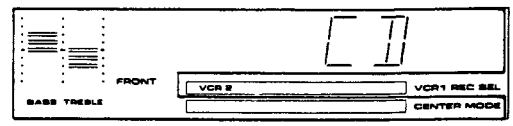


⑤ Display during test tone output.

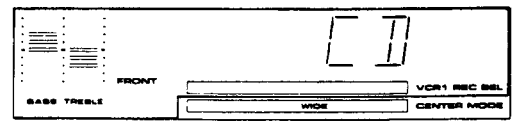
Indicates the speaker from which test tone is being output.



⑥ Indicates unit selected with VCR1 recording selector.



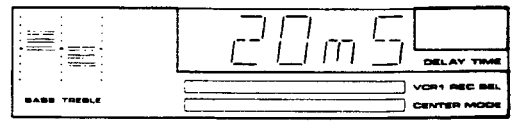
⑦ Indicates center mode (NORMAL, WIDE, PHANTOM) at time of Dolby Pro Logic Surround or Dolby 3CH Logic.



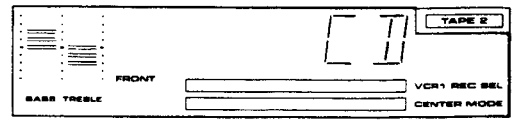
⑧ Display when the bass synthesizer is ON.

At time of adjustment, the status of adjustment is indicated in units of 10 from 0 to 100.

⑨ Indicates delay time from 16 to 30ms during delay time adjustment (see page 30).

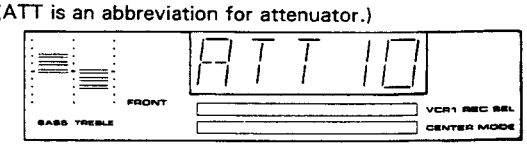


⑩ Red color display when tape 2 monitor is ON.



⑪ Denotes ATT in units of 2 from 0 to 12 during input level adjustment.

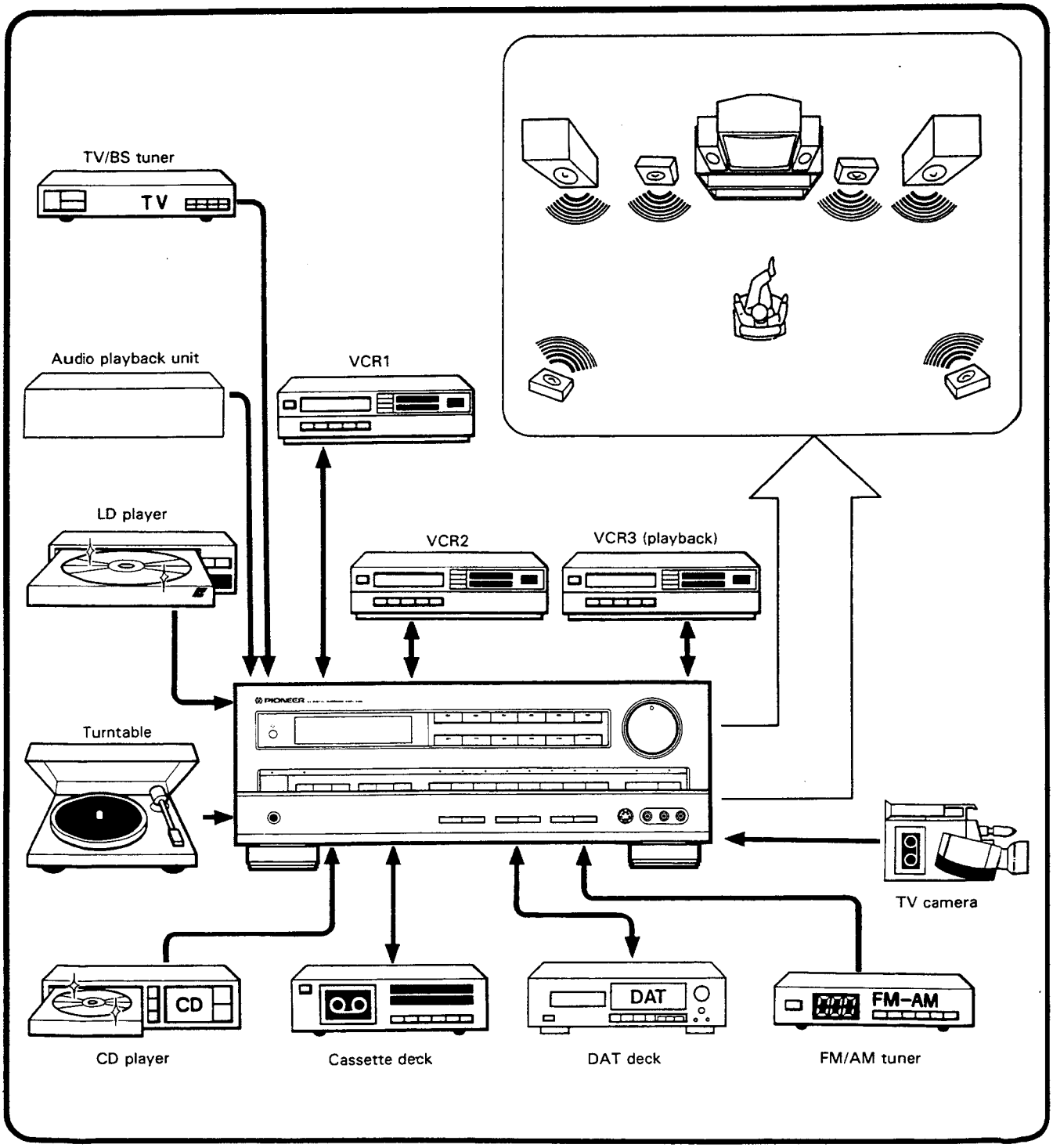
(ATT is an abbreviation for attenuator.)



CONNECTIONS

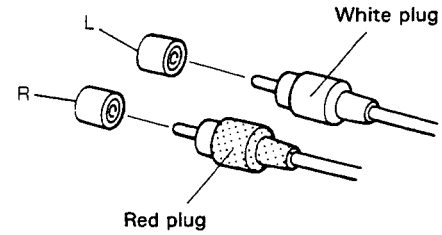
When making connections, cut off power supply to each unit and remove power cord from outlet.
After all the signal wires have been connected, connect the power cord.

EXAMPLE FOR SYSTEM CONNECTIONS



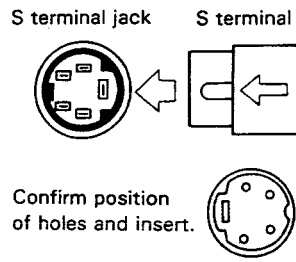
• How to connect audio input/output cord.

Use cords with red or white pin plugs attached.
Connect the white plug to the left side and the red plug to the right side. Always insert the plugs fully into the terminals.



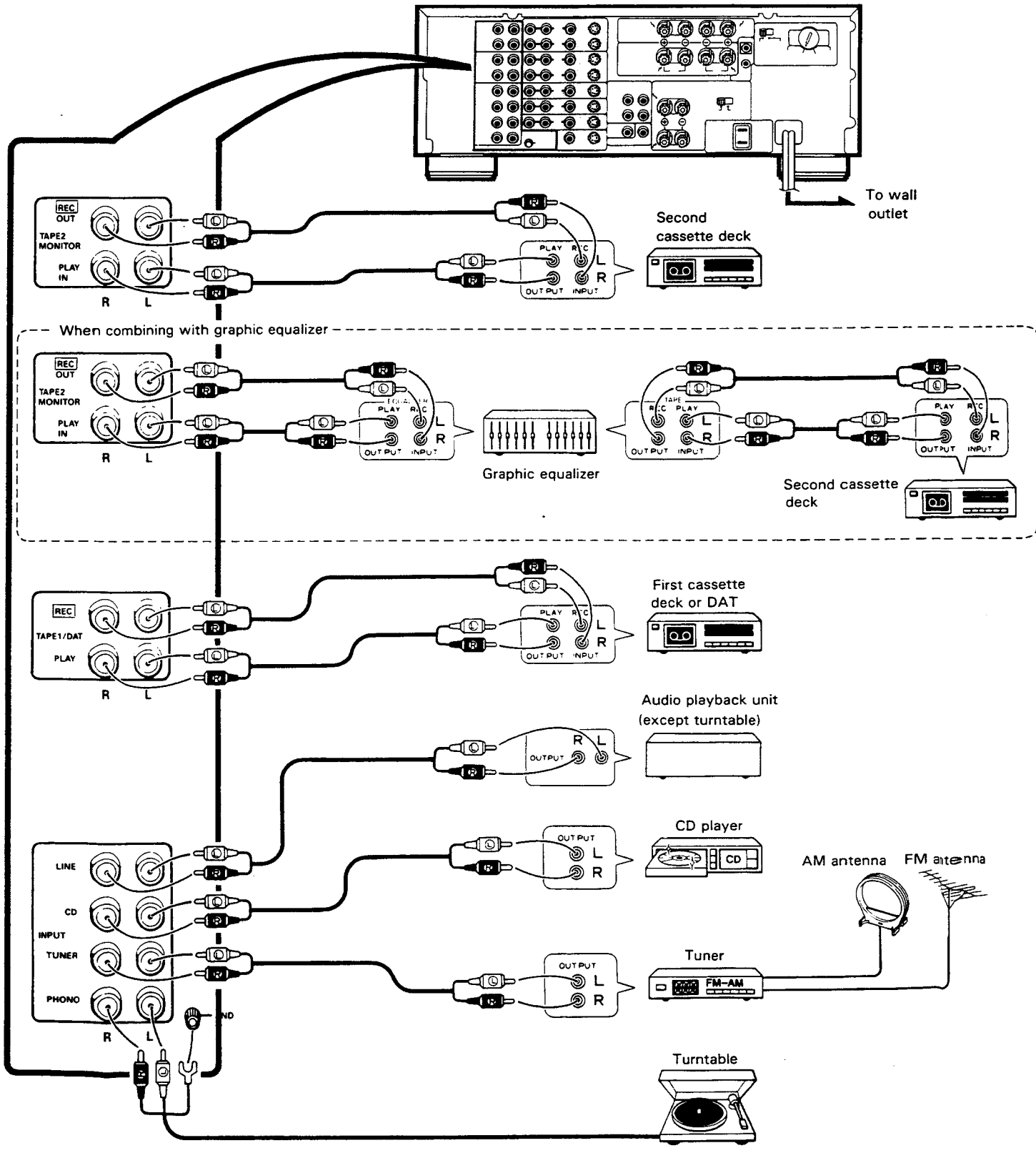
• S (Video) Terminal

When the S terminal is used to connect a video unit to the main unit, connection with the monitor TV S terminal can also be made.
For operation of each unit connected by S terminal, refer to the handling instructions of each unit.
Since the S terminal is a video terminal, be sure to always make audio connections as well.

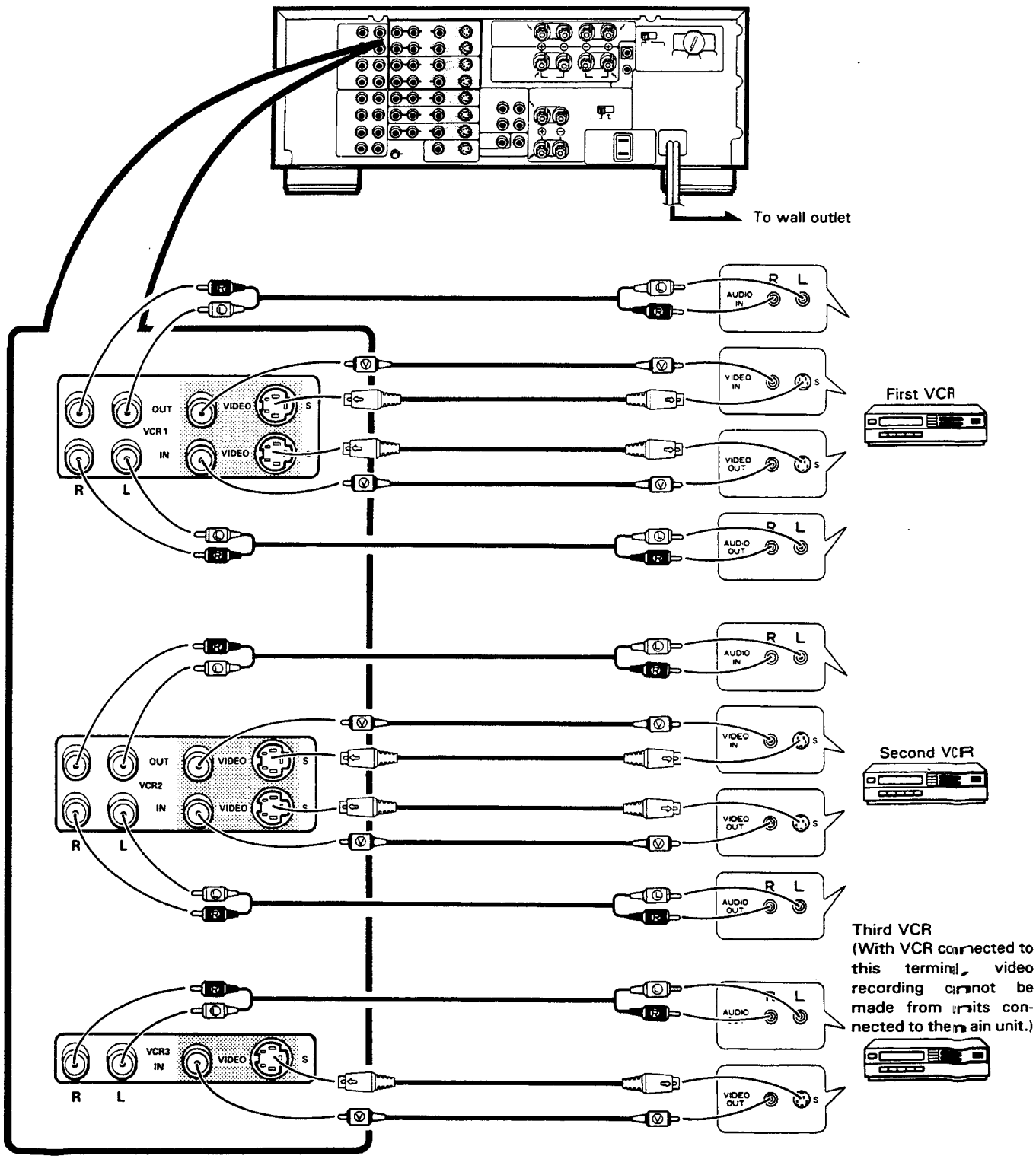


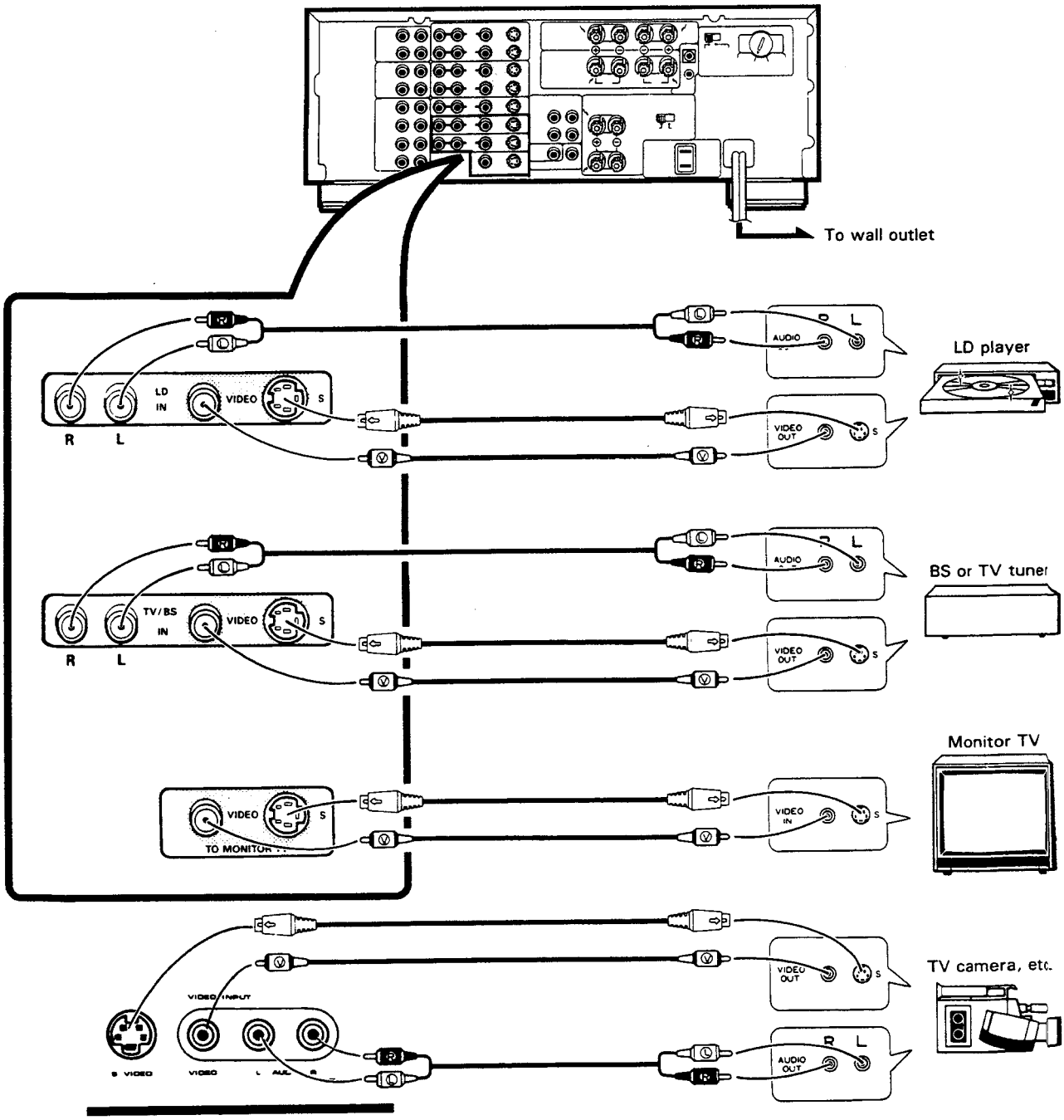
For switchover between monitor TV S terminal and VIDEO terminal, refer to handling instructions provided with monitor TV.

• AUDIO UNIT CONNECTION



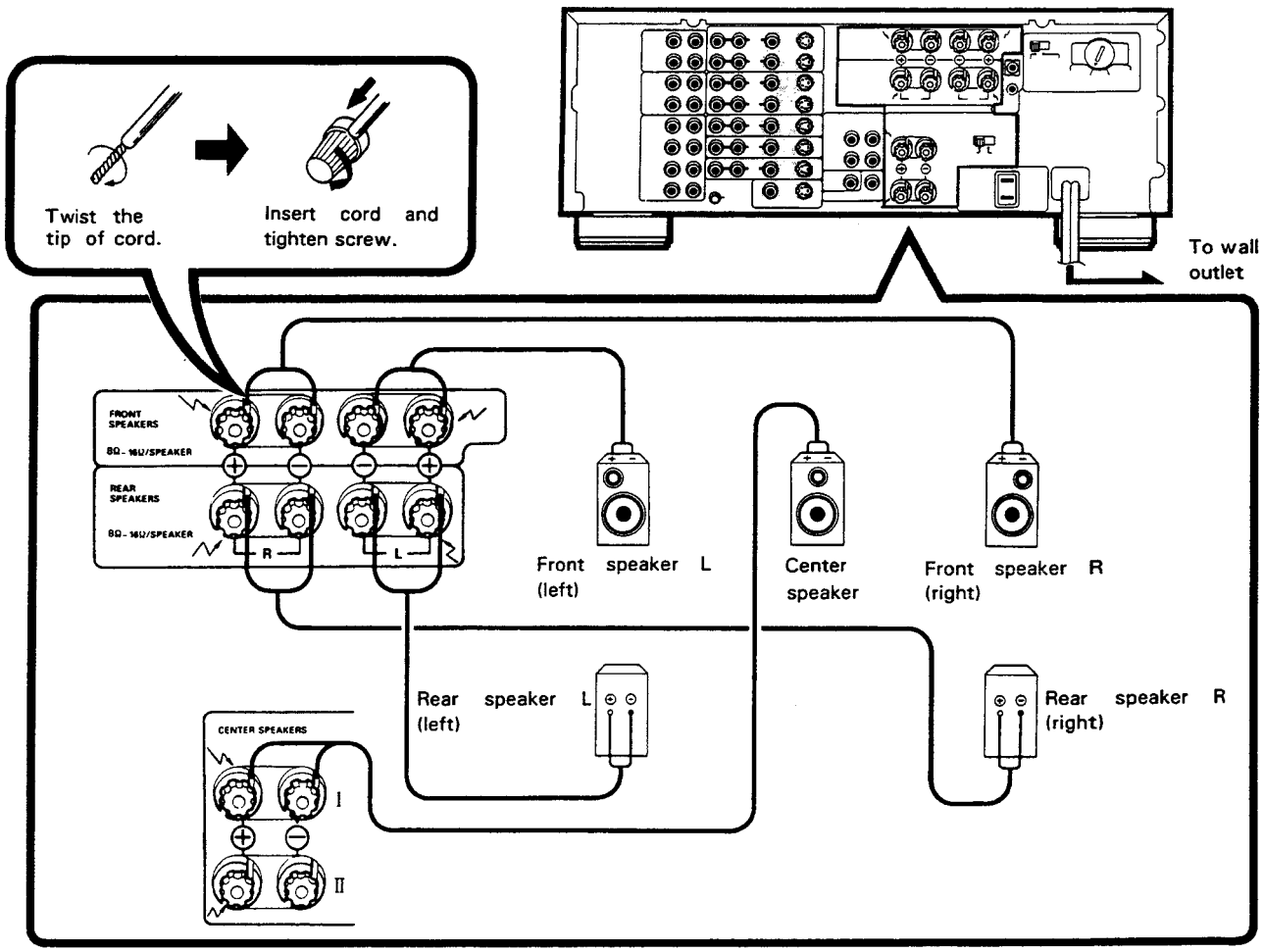
• VIDEO UNIT CONNECTION





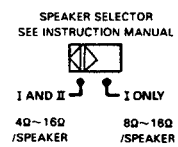
VIDEO INPUT terminals
(front panel)

• SPEAKER CONNECTION



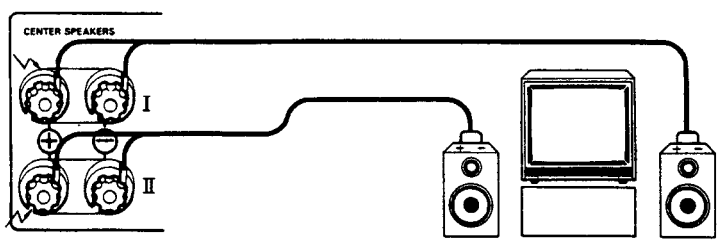
• Case of dual center with two center speakers connected

This unit has two terminal systems for center speakers so that two speakers can be connected.
When center speakers cannot be placed above, below or behind the television, they can be placed to the right and left of the television and still function as center speakers. (Dual center)



Set the speaker selector switch to the [I AND II] side.

Use speakers with an impedance of 4 to 16 ohms.

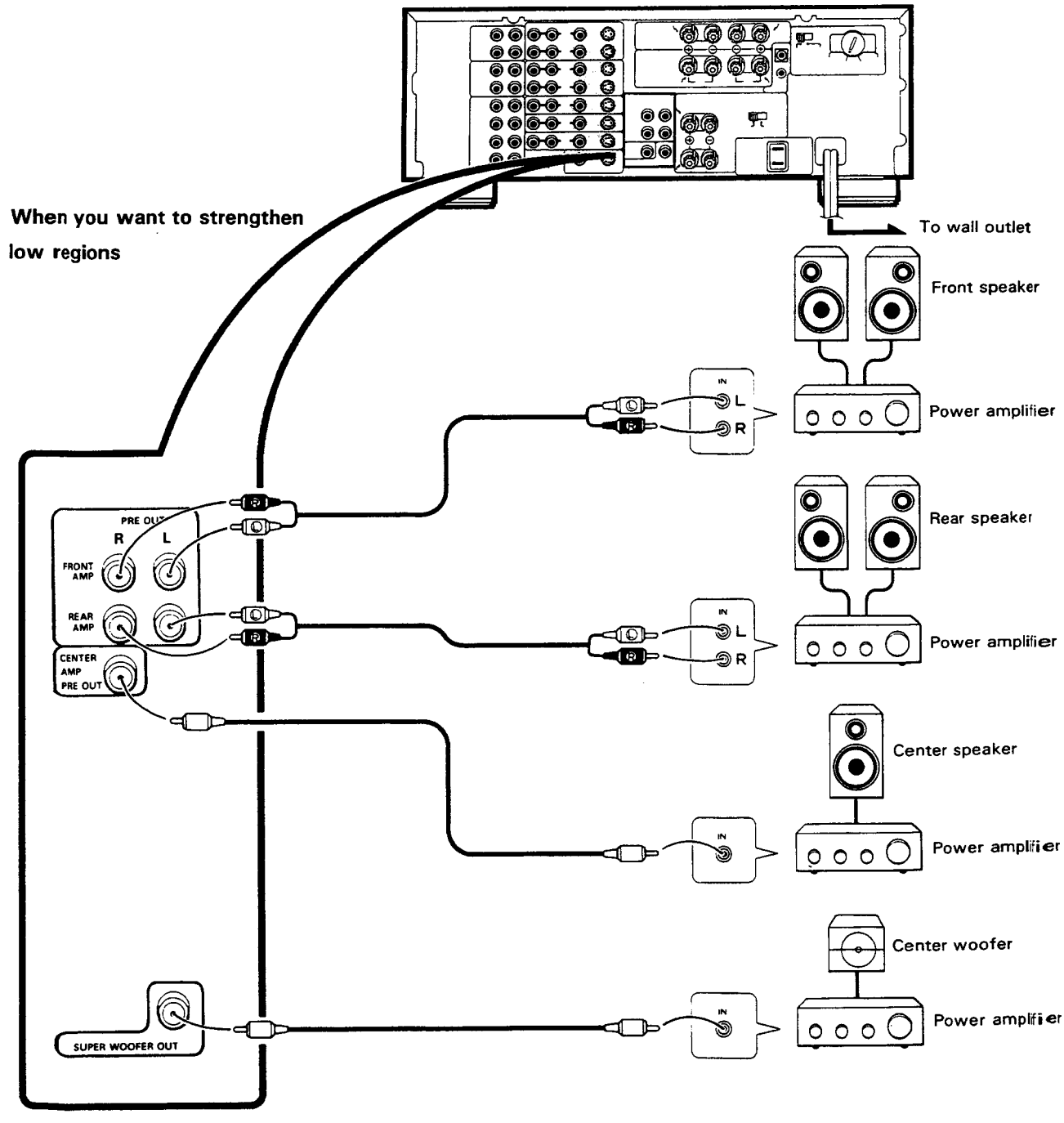


NOTE:

- *When connecting only one speaker to a center speaker terminal, always connect to the [I] terminal, and set the speaker selector switch to [I ONLY] side. If the switch is set to the [I AND II] side, no sound comes from the center speaker.*

• IN COMBINATION WITH OTHER POWER AMPLIFIER

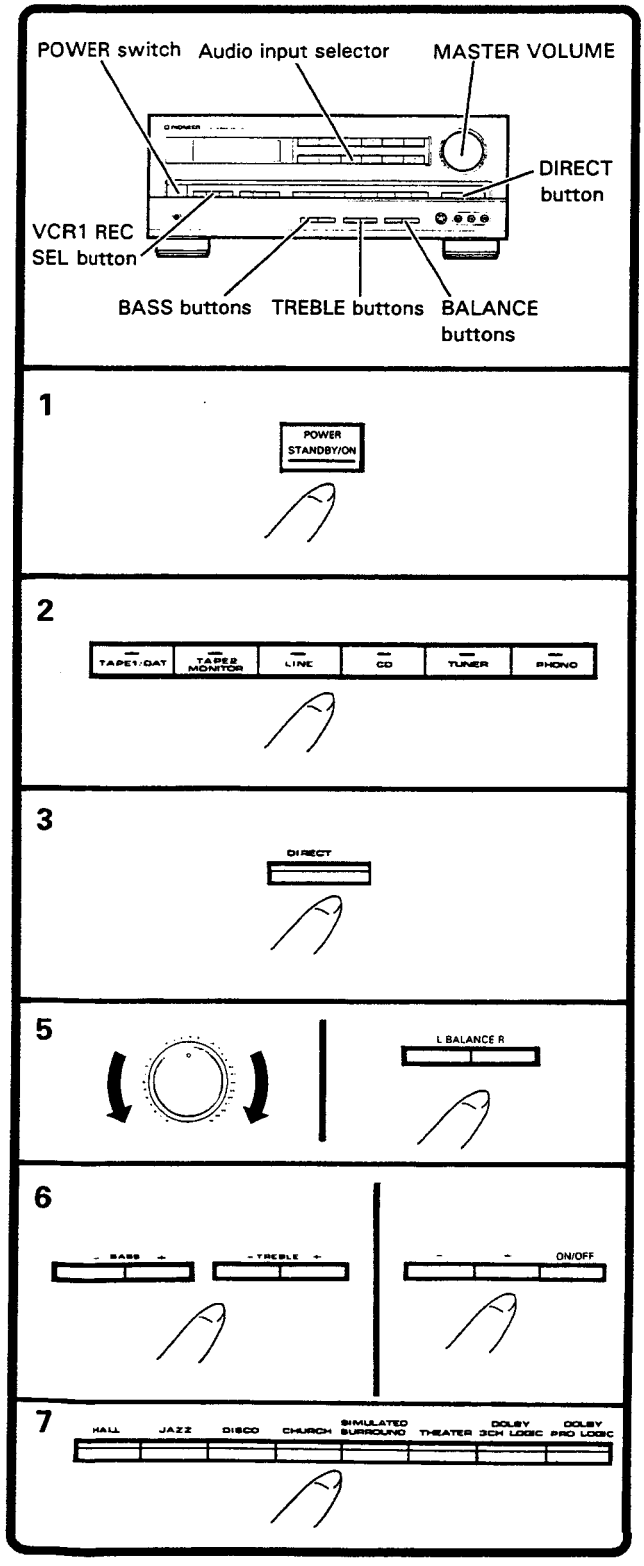
This unit can be combined with another power amplifier and used as a preamplifier.



NOTE:

- *When this unit is combined with other power amplifier and used as a preamplifier, do not connect speakers to the unit's speaker terminals. Otherwise sound will come from both the speakers connected to the unit and speakers connected to the power amplifier.*
- *When using a stereo amplifier as power amplifier for the center channel, connect to either the left or right terminal.*

OPERATIONS



Audio Source Playback Procedure

For playback of sound input digitally by CD or DAT, switch to digital input with the INPUT DIGITAL/ANALOG button.

1. Press POWER switch to engage power supply.

2. Select unit of playback with input selector buttons.

- For playback on cassette deck 1 or DAT ····· TAPE1/DAT
- For playback on cassette deck 2 ····· TAPE2 MONITOR
- For playback on unit connected to LINE terminal ····· LINE
- For listening to CD ····· CD
- For listening to broadcast ····· TUNER
- For listening to record ····· PHONO

NOTE:
When using a unit other than cassette deck 2, set the TAPE 2 MONITOR to OFF. (TAPE2 on display extinguishes.)
When TAPE2 MONITOR is at ON, is there sound?
TAPE2 sound is output.

3. To Select the DIRECT mode

When DIRECT is set to ON, surround, sound quality adjustment, right and left balance adjustment, and bass synthesizer cannot be used, but faithful playback of source sound can be obtained.

4. To Operate Selected Unit

Refer to the Operating Instructions of each unit.

5. To Adjust Sound Volume

- Sound volume is adjusted with the MASTER VOLUME control.
- When the right and left sound balance is skewed, adjust with the BALANCE buttons. If L and R buttons are pressed simultaneously, the center is returned to.

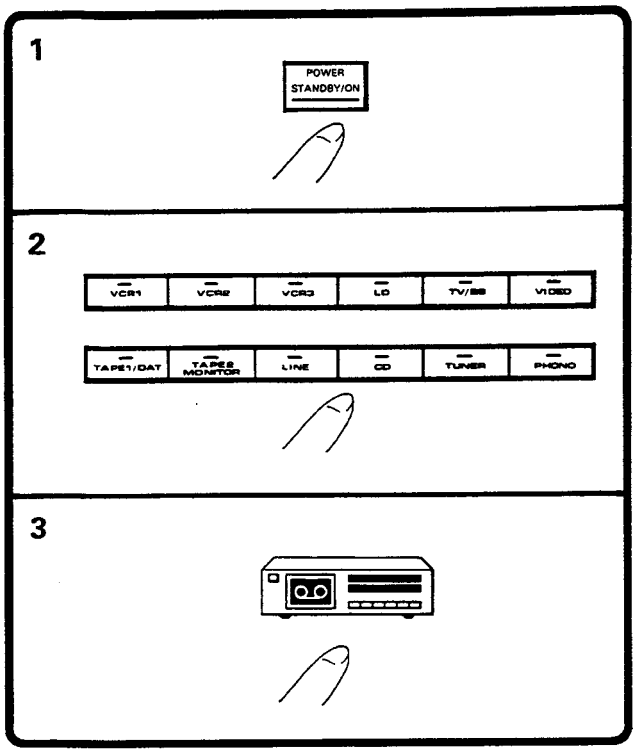
6. To Adjust Sound Quality, etc. (DIRECT is at OFF)

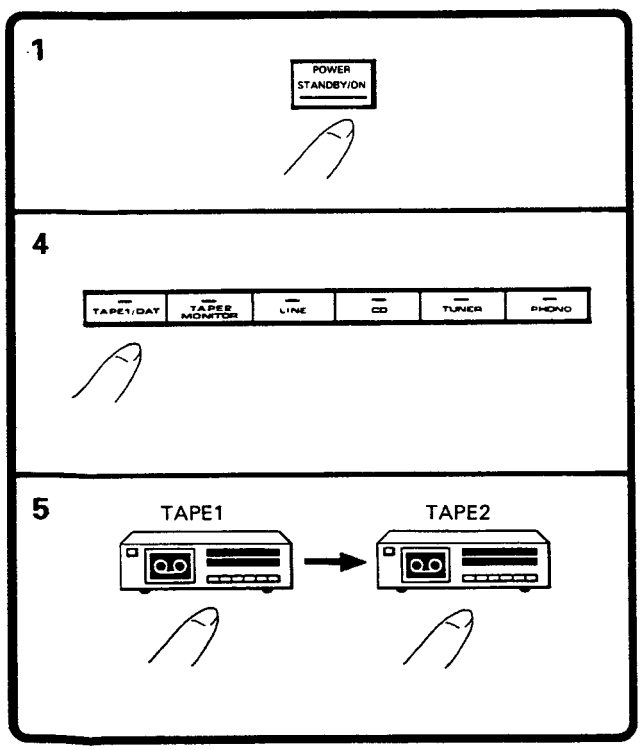
- Adjust for the desired sound quality with the TREBLE and BASS buttons. If + and − are pressed simultaneously, the status becomes flat.
- To emphasize heavy bass sounds, set the bass synthesizer to ON and adjust strength with the + and − buttons.

7. Select the Surround mode with the SURROUND MODE button.

In the case of monaural source, set for SIMULATED SURROUND.

NOTE:
If SURROUND MODE buttons are selected when DIRECT is at ON, DIRECT goes OFF.





How to Record onto Tape

The source selected by input selector can be recorded on TAPE1/DAT or TAPE2.

1. Press the POWER switch to engage the power.

2. Select the source for recording with audio and/or video input selector.

Cassette deck (DAT) cannot be selected for recording.

3. Load tape for recording into cassette deck (TAPE1 or TAPE2) for recording or into DAT and execute recording operation.

4. Start playback of the unit that has been selected by the audio or video input selector.

When recording while listening to played back sound, adjust sound quality and sound volume of amplifier.

Adjustment of sound volume, balance and treble or bass, etc., and adjustment of surround and surround field are not related to recording.

- In the case of recording with TAPE2 terminal cassette deck, if the cassette deck is one with a monitor function attached, and if the input selector of TAPE2 MONITOR is at ON, the recorded sound can be listened to.

When the power supply to this unit is at STANDBY, the recording output of the source unit selected prior to setting for STANDBY is output from the REC terminal.

How to copy onto tape

TAPE1/DAT and TAPE2 can be copied from one to the other.

To copy from [TAPE1/DAT] to [TAPE 2]:

1 Press POWER switch to engage power.

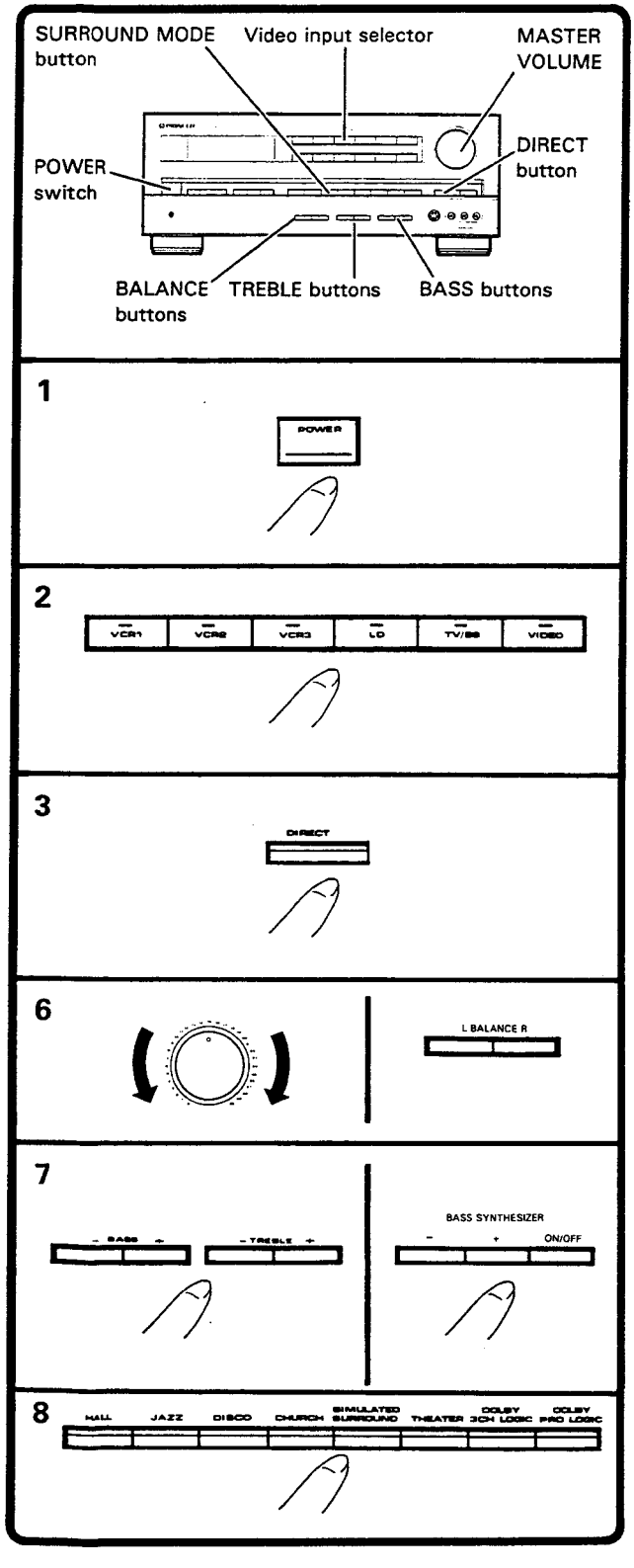
2 Supply power to cassette deck (or DAT) connected to TAPE1/DAT terminal.

3 Supply power to cassette deck at TAPE2 terminal and load tape for recording.

4 Set the audio input selector to TAPE1/DAT.

5 Begin sound recording with cassette deck at TAPE2 terminal and playback cassette deck (or DAT) at TAPE1/DAT terminal.

- If the cassette deck of TAPE2 terminal is monitor function included:
  TAPE2 MONITOR is selected during recording with the audio input selector. The sound of the recorded tape can be heard exactly as recorded.
- Case of copy from [TAPE2] to [TAPE1/DAT]
  Check whether or not input selector is at TAPE1/DAT, and replace TAPE1/DAT and TAPE2 in the same procedure as the above operation, and select TAPE2 MONITOR with the audio input selector.



Video Source Playback Procedure

1. Press the POWER switch to engage the power supply.

2. Select the unit of playback with the video input selector buttons.

- For playback on VCR1 ..... VCR1
- For playback on VCR2 ..... VCR2
- For playback on VCR3 ..... VCR3
- For viewing LaserDisc ..... LD
- For viewing TV/BS broadcast ..... TV/BS
- For playback on TV camera, etc., connected to front panel ..... VIDEO

When the DIRECT button is at ON, there is no sound quality or balance adjustment and no surround playback, but playback of sound faithful to the source can be obtained.

NOTE:
Set TAPE2 MONITOR to OFF (TAPE2 on display extinguishes). If left at ON, there is either no sound or TAPE2 sound is output.

3. To Select the DIRECT mode

When DIRECT is set to ON, surround, sound quality adjustment, right and left balance adjustment, and bass synthesizer cannot be used, but faithful playback of source sound can be obtained.

4. Engage monitor TV power supply

- In the case of S terminal connection, switchover occurs between S terminal and pin jack terminal. (Refer to Operating Instructions for monitor TV.)
  S terminal of monitor TV can only be used for playback on respective units when the later have been connected to the S terminals on the main unit.

5. To Operate Selected Unit

Refer to the Operating Instructions of each unit.

6. To Adjust Sound Volume

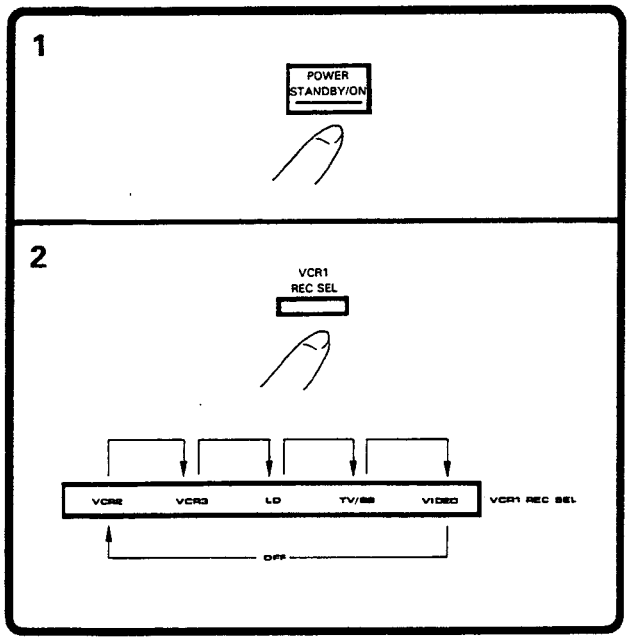
- Sound volume is adjusted with the MASTER VOLUME control.
- When the right and left sound balance is skewed, adjust with the BALANCE buttons. If L and R buttons are pressed simultaneously, the center is returned to.

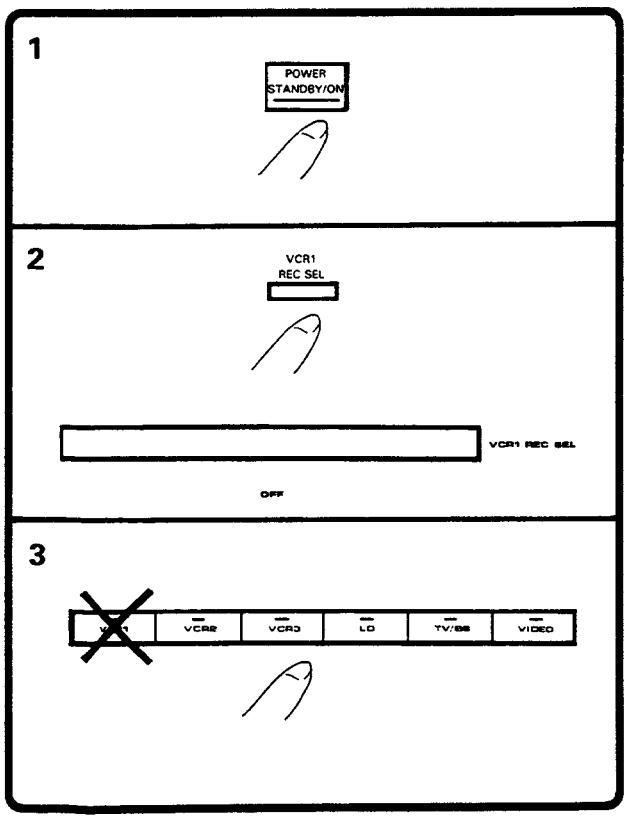
7. To Adjust Sound Quality, etc. (DIRECT is at OFF)

- Adjust for the desired sound quality with the TREBLE and BASS buttons. If + and − are pressed simultaneously, the status becomes flat.
- To emphasize heavy bass sounds, set the bass synthesizer to ON and adjust strength with the + and − buttons.

8. Select the Surround mode with the SURROUND MODE button.

In the case of monaural source, set for SIMULATED SURROUND.
NOTE:
If SURROUND MODE buttons are selected when DIRECT is at ON, DIRECT goes OFF.





How to Make Video Recording onto Video Tape

■ Video Recording With VCR1

(When using VCR1 REC SELECTOR)

Audio and video recording can be made of the source selected by VCR1 REC SELECTOR. Set the input selector to a position other than VCR1.

1. Press the POWER switch to engage the power supply.

2. Select unit of recording with VCR1 REC SELECTOR.

The indicator on the display lights up for display.

3. Load tape for recording into VCR1 and execute recording procedure.

- Select line input for VCR.
- For VCR operation, refer to the VCR Operating Instructions.

4. Begin playback on unit selected by VCR1 REC SELECTOR.

- The terminal which is connected to the pin jack terminal does not provide output via the S-terminal. When other units are connected by S terminal, recording cannot be done using pin jack terminal.

(When VCR1 REC SELECTOR is not used)

The video source selected by input selector can be recorded.

1. Press the POWER switch to engage the power supply.

2. Set the VCR1 REC SELECTOR to state of no display (SOURCE).

3. Select source of recording with input selector.

- Do not select VCR1.
- Set TAPE2 MONITOR to OFF (TAPE2 indicator on display extinguishes).

4. Load tape for recording into VCR1 and execute recording procedure.

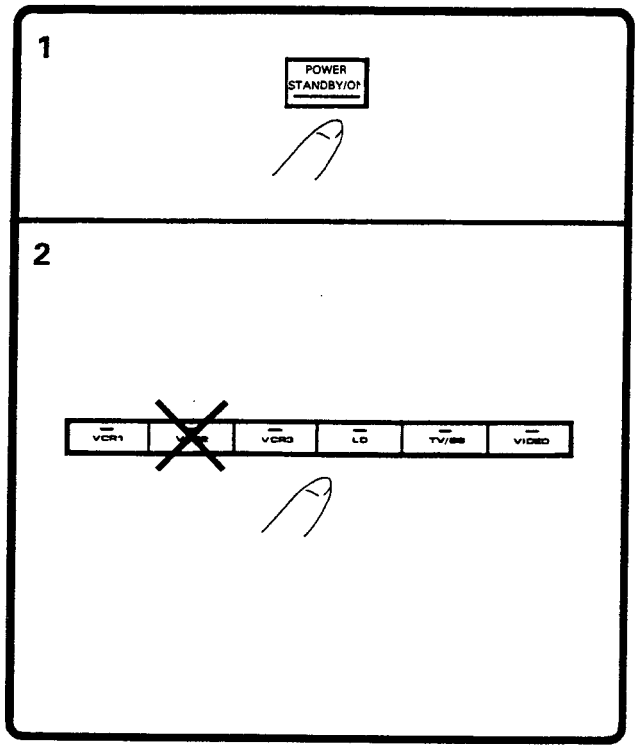
- Select line input for VCR.
- For VCR operation, refer to the VCR Operating Instructions.

5. Begin playback of unit selected by input selector.

NOTE:

Concerning S (video) terminal

- *The S (video) input/output terminal and the pin jack input/output terminal are of independent circuit composition, and each functions independently.*
- *When connection has been made to both S (video) terminal and pin jack and these have been selected by input selector, signals from both S (video) terminal and pin jack terminal are output at TO MONITOR TV terminal. At the connected Monitor TV side choose which signal is to be adopted.*



■ Video Recording With VCR2

The video source selected by input selector can be recorded if VCR2 is in recording condition.
Set the VCR1 REC SELECTOR at a position other than VCR2.

1. Press the POWER switch to engage power supply.

2. Select the source of recording with input selector.

- Do not select VCR2.
- Set TAPE2 MONITOR to OFF (TAPE2 indicator on display extinguishes).

3. Load tape for recording into VCR2 and execute recording procedure.

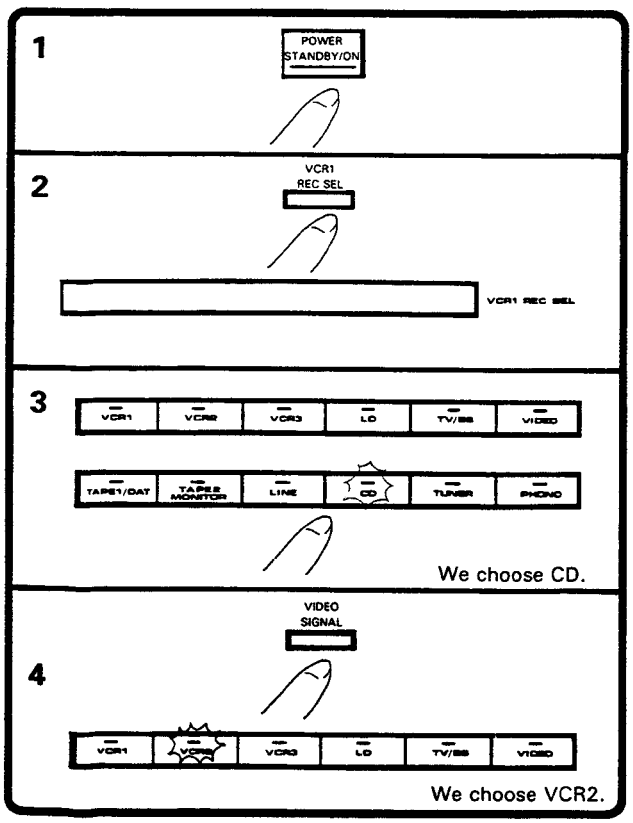
- Select line input for VCR.
- For VCR operation, refer to the VCR Operating Instructions.

4. Begin playback of unit selected by input selector.

NOTE:

- *When video recording with the power supply in STANDBY condition, use the pin jack connection for video signal. There is no signal output with S terminal connection.*
- *When S terminal only of VCR2 is connected, video recording cannot be made from units connected only by pin jack.*

How to Video and Audio Combined and Recording on VCR



When the video signal selector is used, video alone can be switched in sequence while audio is left unaltered.
This function can also be used to combine video and audio and record the same on VCR.
As an example, let us assume that we want to combine CD sound with the video of VCR2 and record them on VCR1.

1 Press the POWER switch and engage the power supply.

2 Set the VCR1 REC SELECTOR to (SOURCE) with no display.

3 Select the audio source with the audio/video input selector.

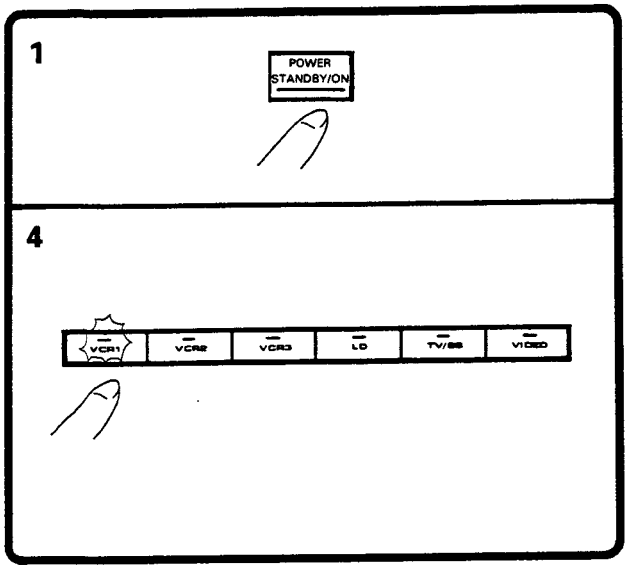
The red indicator lights up.

4 Press the VIDEO SIGNAL selector and select the video source.

The orange indicator lights up.

5 Load the video recording tape into the VCR1 deck, and perform video recording operation.

6 Playback the units selected in steps 3 and 4 above.



How to copy on Video Tape

Copy can be made from VCR1 to VCR2 or vice versa.
To copy from [VCR1] to [VCR2]

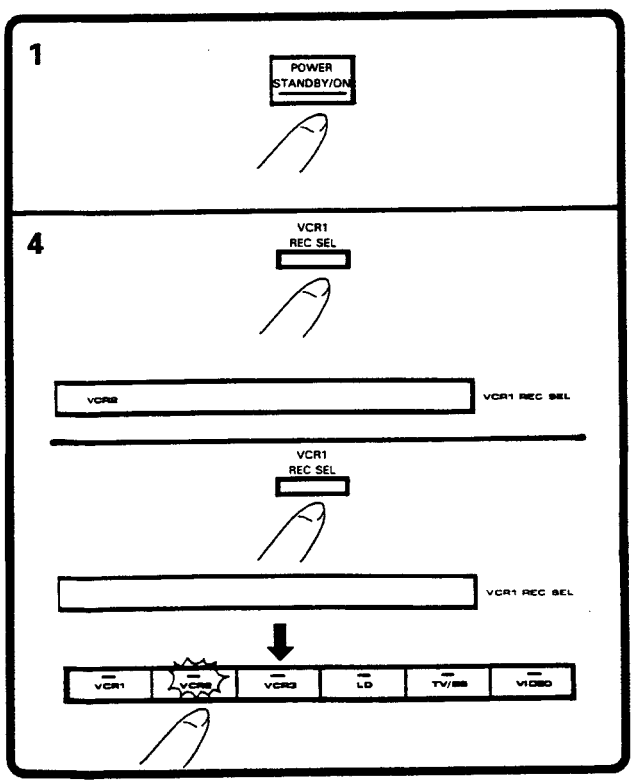
1 Press the POWER switch and engage the power supply.

2 Load the prerecorded tape into the VCR1 deck.

3 Load tape for recording into the VCR2 deck.
Select external (line) input for the VCR2 deck.

4 Select VCR1 with the video input selector.

5 Prepare the VCR2 deck for video recording and begin playback with the VCR1 deck.



To copy from [VCR2] to [VCR1]

1 Press the POWER switch and engage the power supply.

2 Load the prerecorded tape into the VCR2 deck.

3 Load tape for recording into the VCR1 deck.
Select external (line) input for the VCR1 deck.

4 (When using the VCR1 REC SELECTOR)
Select VCR2 with the VCR1 REC SELECTOR.
Set the video input selector to other than VCR1.

(When not using the VCR1 REC SELECTOR)
Set the VCR1 REC SELECTOR to SOURCE and select VCR2 with the video input selector.

5 Prepare the VCR1 deck for video recording and begin playback with the VCR2 deck.

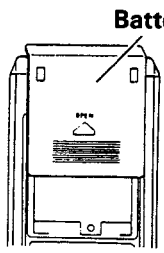
NOTE:

- *When video recording from VCR1 to VCR2, do not select VCR2 with the VCR1 REC SELECTOR.*
  When VCR1 is selected with the video input selector and VCR2 is selected with VCR1 REC SELECTOR, video recording cannot be executed because, in order to prevent loop vibration, signals are not output from the OUT terminal of VCR2.

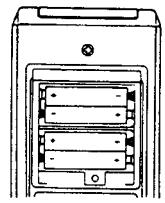
REMOTE CONTROL OPERATION

- **First, place battery into the remote control.**

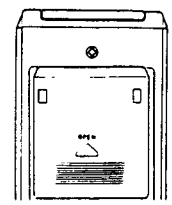
1 Open cover of battery case on back of the remote control.



2 Load the size AAA, alkaline, dry-cell batteries (LR03/AM-4) provided as indicated on the battery case.

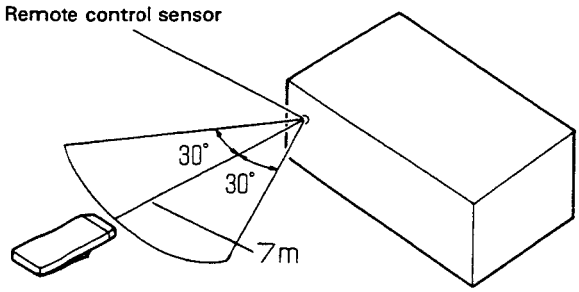


3 Close the case cover.



- **Range under which operation with remote control is possible** ···

About 7 meters distance from the remote control sensor and up to an angle of about 30 degrees.



If direct sunlight or strong fluorescent rays strike the photo receptor of the amplifier directly, there may be instances in which the remote control cannot be operated. At such times, change the unit location or move the fluorescent light away from the photo receptor.

- **Battery Replacement**
  - If the transmit indicator (page 36) does not light up when a remote control button is pressed, the battery has worn out and must be replaced.
  - After the dead battery has been removed, the memory contents will soon be extinguished, so load a new battery into the unit as soon as possible.
  - Always use designated batteries for replacement (size AAA alkaline dry cell LR03/AM-4).
  - If a dead battery is left in the unit, the commands which have been mastered may be erased, so if the range of remote control operation becomes extremely short, or if the TRANSMIT indicator has become dark, we recommend that the battery be replaced as soon as possible.
  - If the learned commands should be extinguished, replace the battery and have the unit learn the commands once again.

NOTE:

- *If an incorrect dry cell battery is used, there may be fluid leakage, ruptures or other danger.*
  Be especially careful about the following points.
  1. *Load the battery so that its plus + and minus − side are in the proper direction as indicated in the battery case.*
  2. *Do not use a fresh battery together with a battery that has already been used.*
  3. *Even with dry cell batteries of the same shape, the voltages may be different. Never mix the types of batteries and use them together.*
- *Functions not contained by your remote control unit or functions not compatible with your remote control unit cannot be executed even if an operation button for them exists on the remote control.*

- The remote control provided with the unit can be used in the following ways.

① To operate the VSA-7500

See pages 29 and 30.

② To operate products with the Pioneer mark attached

By changing the transmit mode, other products with the mark can be centrally controlled with the remote control provided.

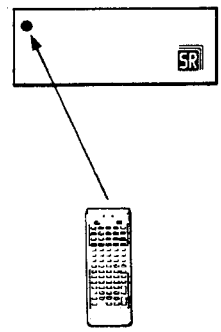
See page 28 and pages 31 to 34.

③ To operate products with the mark but no remote control sensor

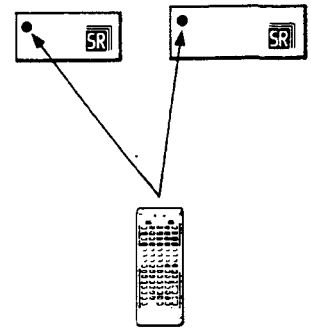
For products which have the mark but no remote control sensor, if the product is connected to this unit by cord, the sensor of this unit can be used to operate the product.

④ To operate AV equipment by other makers.

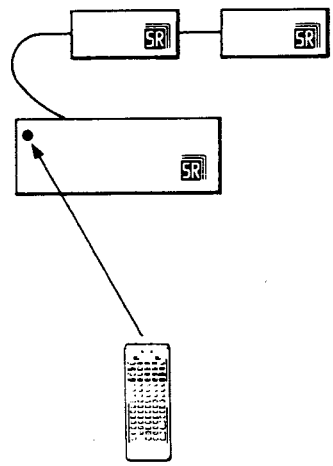
AV equipment by other makers can be operated by the remote control if the learn function is used.



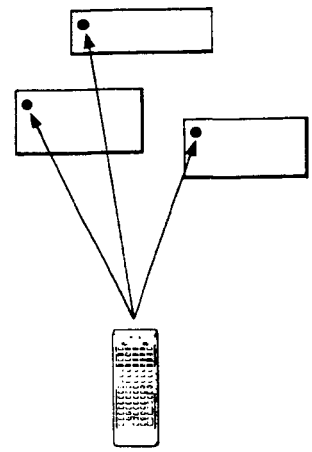
① To operate the VSA-7500



② To operate products with the Pioneer mark attached (Change over the transmit mode (AUDIO, VIDEO, AUX))



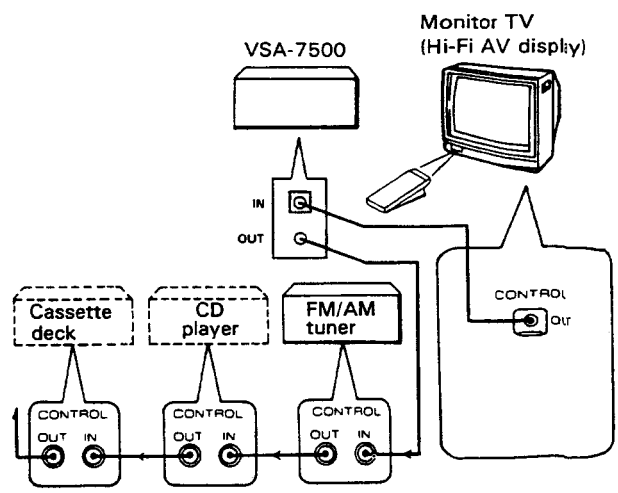
③ To operate products with the mark but no remote control sensor (Connect the control cord.)



④ To operate AV equipment by other makers (Use the learn funcion.)

• REMOTE CONTROL CORD CONNECTION

- If the control cord is used to connect products with the mark but no remote control sensor (i.e., FM/AM tuner, turntable, cassette deck), the system as a whole can be operated with the remote control for this unit. An example is given in the illustration at the right. Be sure to always connect OUT to IN. There is no special predetermined sequence for connection. However, connection to units with only an IN terminal should be made lastly.

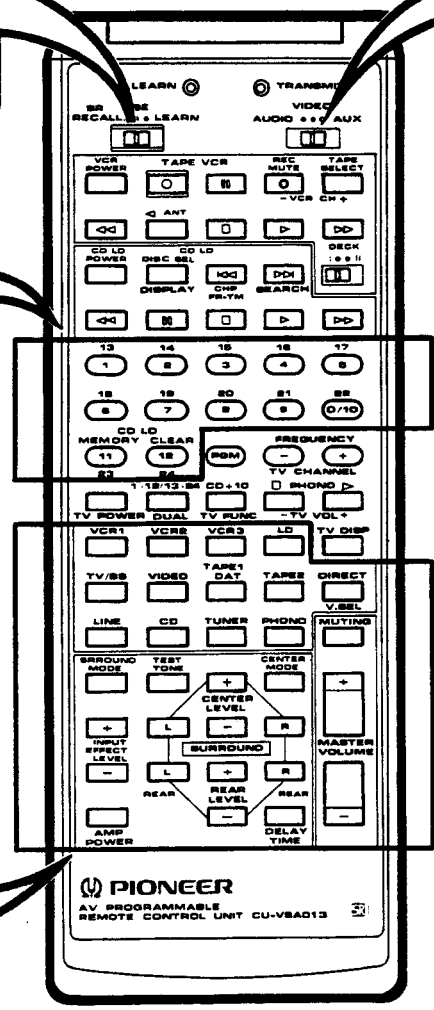


NOTE:
When a plug is inserted into the CONTROL IN terminal of this unit, the unit's remote control sensor cannot be used. Use the remote control sensor of the unit connected to the IN terminal.

LEARN selector switch
Normally set this switch to SR RECALL. When implementing a learning operation, set to LEARN, and when using something that has been learned, set to USE.

Numerical buttons 1 to 12
Buttons 1 to 12 can be used as station buttons in manipulating TUNER or TV. In manipulating CD or LD, buttons 1 to 10 can be used as numerical buttons. Button 11 is used with the MEMORY button and 12 is used as the CLEAR button.

Main Unit Operation Buttons
These buttons operate the main unit. See page 29 for how to use them.



AUDIO/VIDEO/AUX selector switch
Change this switch as follows.

AUDIO:

Set to this position for operating audio equipment. It facilitates operation of CD player, turntable, cassette deck, tuner, etc.

VIDEO:

Set to this position for operating video equipment. It facilitates operation of CD, CDV, LD player, VCR, television, etc.

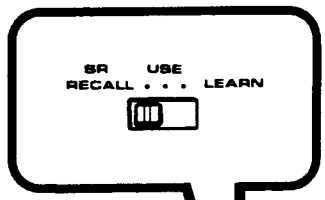
AUX:

Set to this position for learning and using other remote control signals. Since nothing is in memory except the main unit operation button, have the unit learn operation of a second VCR, cassette deck, LD, etc., and use it accordingly.

NOTE:
Buttons discussed in the explanation which are not designated as AUDIO/VIDEO/AUX selector switch can operate in any mode.

MAIN UNIT OPERATION

Set to SR RECALL.

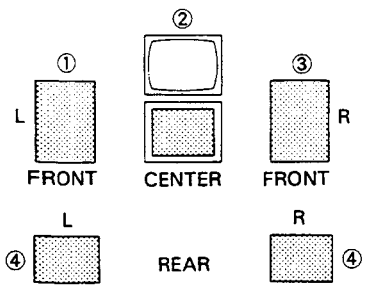


Input Selector Buttons

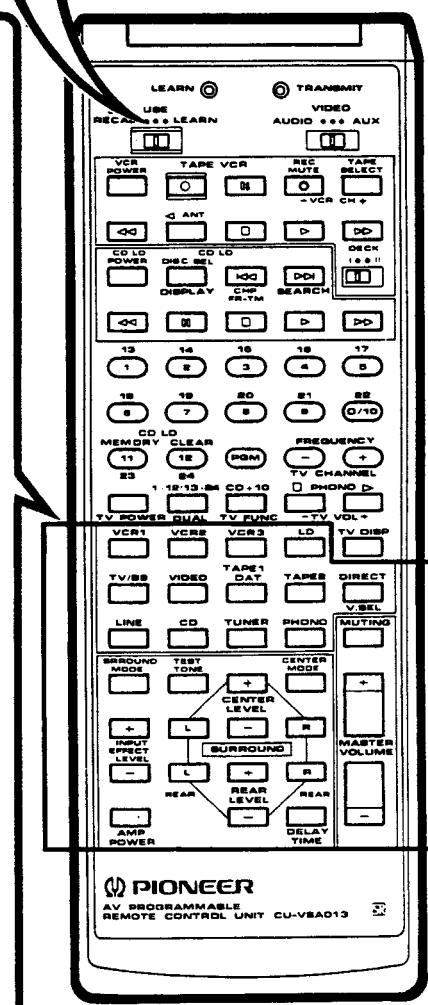
Used to select the audio and/or video source in accordance with the AUDIO/VIDEO/AUX selector switch.

Test Tone Button (TESTTONE) (Remote Control only):

Sets at ON/OFF the output of test tone for adjusting the surround level when executing surround playback (Page 7). When set to ON, test tones ① to ④ are output in sequence each for about 2 seconds.

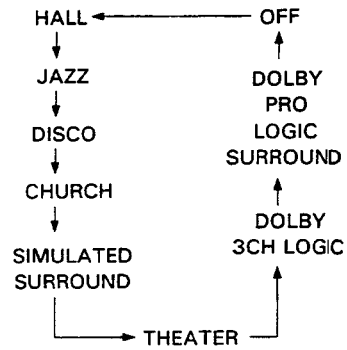


- With Dolby 3CH Logic, sound does not come from the rear speaker.
- At time of Dolby 3CH Logic, Dolby Pro Logic, or Theater, if the center mode is at PHANTOM, there is no sound from the center speaker.



Surround Mode Button (SURROUND MODE):

Each time this button is pressed, the surround mode changes as follows.



Input/Effect Level Adjustment Button (INPUT/EFFECT LEVEL) (Remote Control only)

〈When adjusting the input level〉

Set this button to AUDIO.

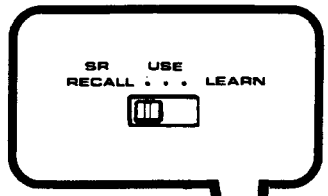
During surround playback, if the input level is to large due to equipment or source, the surround mode indicator blinks.
If playback is continued under this condition, the sound may become distorted. Repeat playback of the portion where the indicator blinks and adjust the input level with the + and/or − button until the blinking stops. ATT can be adjusted in increments of 2 from 0 to 12.

[+] ..... Level rises
[−] ..... Level decreases

Since the adjusted level is memorized with each input selector button, there is no need to perform level adjustment for each switchover.

If the AUDIO/VIDEO selector switch is set to VIDEO during sending mode, INPUT/EFFECT LEVEL +/− buttonsdo not function.

Set to SR RECALL



Amp Power Button (AMP POWER)

Sets the main unit power supply to ON/STANDBY (OFF).

Direct/Video Signal Selector Button (DIRECT/V.SEL):

〈When using as a direct button〉

Set the button to AUDIO.

Press this button to listen to the source sound without passing through quality adjustment or balance adjustment circuits.

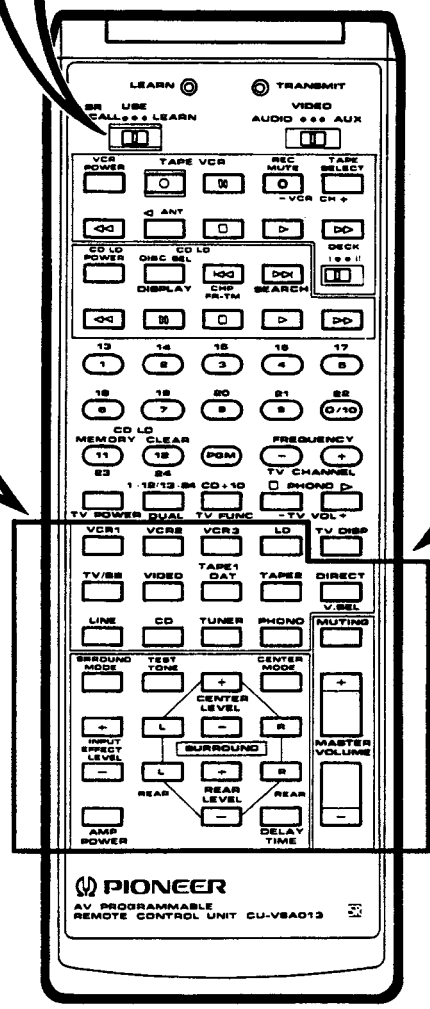
〈When using as a video signal selector button〉

Set the button to VIDEO.

Changes the video alone to another source without changing the sound (see page 9).

Muting Button (MUTING)

Press this button to erase the sound volume temporarily. Press it once again and the sound volume is restored.

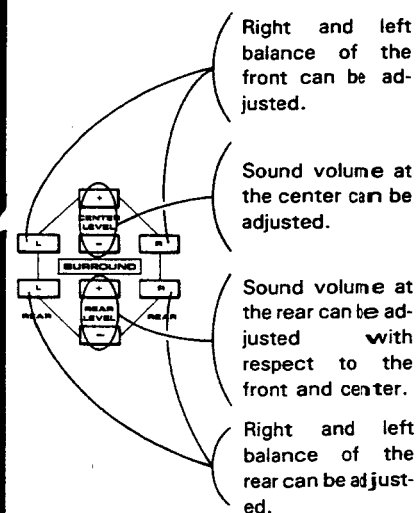


Center Mode Button (CENTER MODE) (Remote Control only):

Calls out in sequence the center mode (NORMAL, WIDE, PHANTOM) of Dolby Pro Logic Surround and Dolby 3CH Logic (see page 6).

Surround Button:

With these 8 buttons, the desired status of surround can be set.


Right and left balance of the front can be adjusted.
Sound volume at the center can be adjusted.
Sound volume at the rear can be adjusted with respect to the front and center.
Right and left balance of the rear can be adjusted.
CENTER LEVEL
SURROUND
REAR LEVEL
REAR

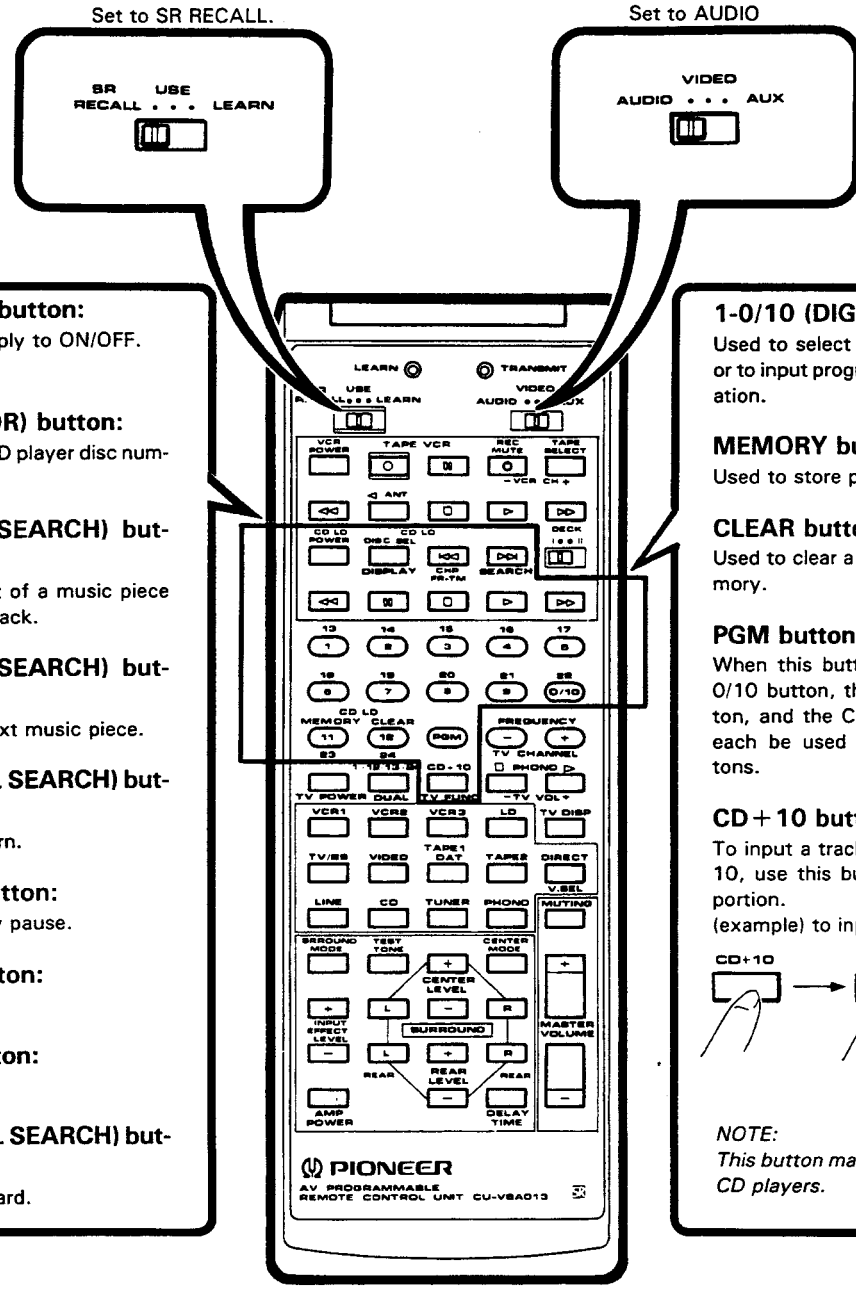
Master Volume Button (MASTER VOLUME):

Adjusts the sound volume.

Delay Time Button (DELAY TIME) (Remote Control only):

Changes the delay time of the surround channel during Dolby Pro Logic Surround Mode.
Each time this button is pressed, adjustment can be made in increments of 2mS from 16mS to 30mS.

• CD OPERATION



CD/LD POWER button:
Sets CD power supply to ON/OFF.

DISC SEL (DISC SELECTOR) button:
Selects multi-play CD player disc number (1-6).

⏮ (TRACK SEARCH) button:
Returns to the start of a music piece now being played back.

⏭ (TRACK SEARCH) button:
Advances to the next music piece.

◀◀ (MANUAL SEARCH) button:
Executes rapid return.

❚❚ (PAUSE) button:
Executes temporary pause.

■ (STOP) button:
Stops playback.

▶ (PLAY) button:
Start plyback.

▶▶ (MANUAL SEARCH) button:
Executes fast forward.

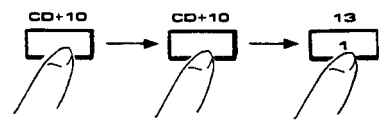
1-0/10 (DIGIT) button:
Used to select a specific music piece or to input program by one-touch operation.

MEMORY button:
Used to store program in memory.

CLEAR button:
Used to clear a program stored in memory.

PGM button:
When this button is pressed, the 1-0/10 button, the MEMORY (11) button, and the CLEAR (12) button can each be used as CD operation buttons.

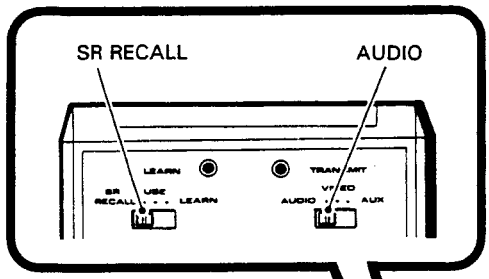
CD+10 button:
To input a track number greater than 10, use this button to input the ten portion.
(example) to input track number 21



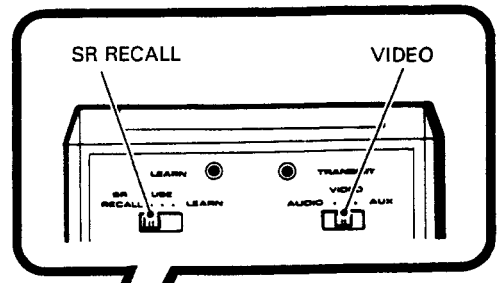
NOTE:
This button may not function on some CD players.

NOTE:
- *Part of the program input sequence or direct selection sequence is implemented through the CD player remote control. Press the PGM button before pressing the first number. By pressing the PGM button, the CD digit buttons function as MEMORY button or CLEAR button.*

• TAPE OPERATION



• VCR OPERATION



DECK I/DECK II Changeover Switch:
Selects the deck for operation.

● (REC) button:
Sets up the record (or record standby) mode.

❚❚ (PAUSE) button:
Stops tape travel temporarily. Press once again to restore tape travel.

○ REC MUTE button:
Creates portion with no sound recording.

◄◄ (FF) button:
Fast forwards the tape in the arrow direction.

◄ (PLAY) button:
Executes reverse playback.

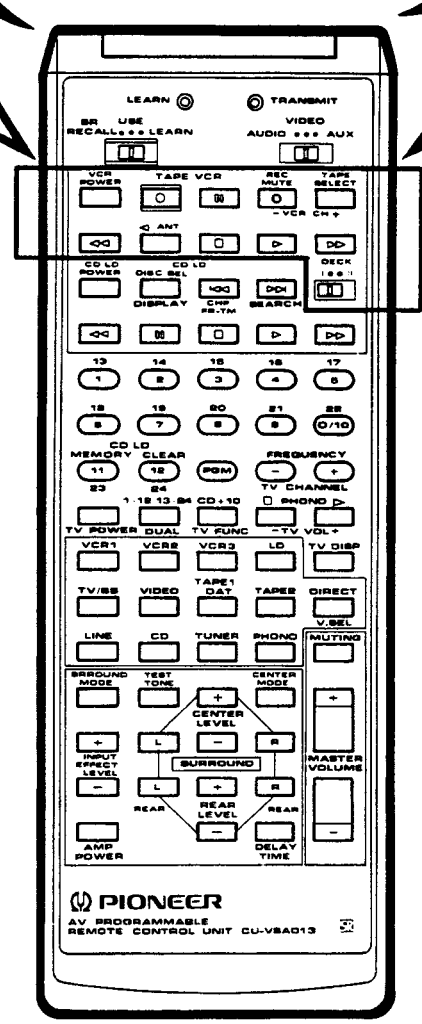
■ (STOP) button:
Stops tape travel.

► (PLAY) button:
Executes forward playback.

►► (FF) button:
Fast forwards tape in arrow direction.

TAPE SELECT button:
Selects the cassette No. (1 to 6) for multi-cassette changer.

NOTE:
- *Some cassette decks cannot be controlled using the switch.*
- *The ◄ button can only be used with cassette decks capable of reverse play.*
- *Some buttons will not work with all types of cassette deck. Refer to the operating instructions for more information.*



VCR POWER button:
Sets VCR power supply to ON/OFF.

● (REC) button:
Starts video recording.

❚❚ (PAUSE/STILL) button:
Executes temporary stop and/or stationary image.

VCR CH+(UP) button:
Changes the channels in sequence.

VCR CH-(DOWN) button:
Changes channels in the direction opposite to +.

◄◄ (REW) button:
Rewinds the tape. Also performs picture search.

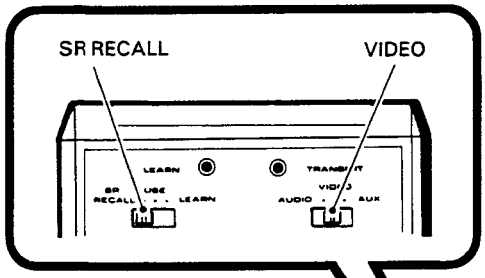
◄/ANT button:
This button works if your VCR has an ANT switchover function. It can switch antenna connection between video and television.

■ (STOP) button:
Stops tape travel.

► (PLAY) button:
Executes playback.

►► (FF) button:
Fast forwards the tape. Also executes picture search.

• LD OPERATION



CD/LD POWER button:
Sets the LD power supply to ON/OFF. (Only in the case of CD, CDV or LD player whose power supply can be turned ON/OFF by remote control)

DISPLAY button:
Displays and erases chapter, frame or time on the screen.

CHP/FR-TM (CHAPTER/FRAME.TIME) button:
Used for search operation of chapter or frame (time).

SEARCH button:
Used for search operation or memory repeat operation.

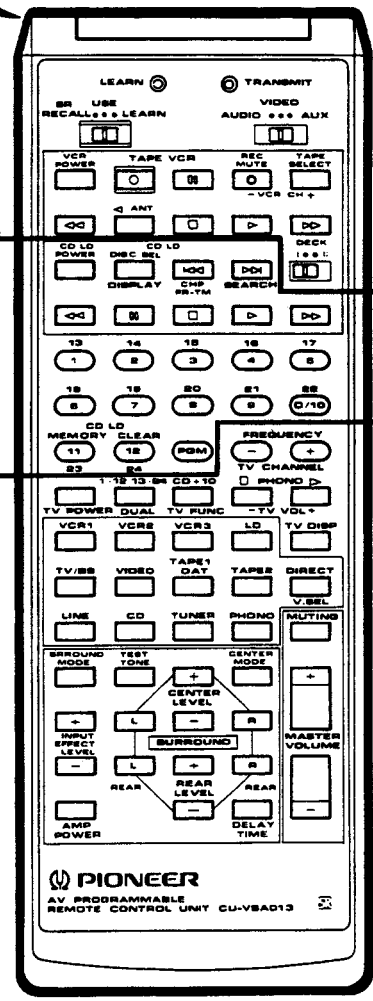
◄◄ (SCAN) button:
Executes rapid return.

▮▮ (PAUSE) button:
Erases image and sound and stops playback temporarily.

■ (EJECT) button:
When this button is first pressed, playback stops. When it is pressed again, the disc table comes out to the prescribed location.

► (PLAY) button:
Executes playback.

►► (SCAN) button:
Executes fast forward.



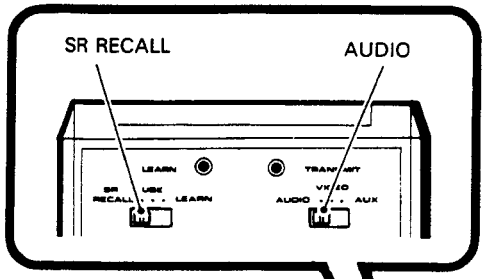
1-0/10 (DIGIT) button:
Used for chapter program or for number search of chapter, frame or time.

MEMORY button:
Used for play of chapter program.

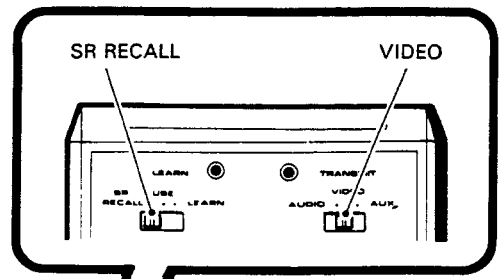
CLEAR button:
Used to release repeat playback, to correct numbers during search operation, to cancel modes or to clear chapter programs.

PGM (PROGRAM) button:
When this button is pressed, the 1-0/10 button, the MEMORY button (11) and the CLEAR button (12) each act as LD operation buttons.
This button is used for chapter program play, frame search and time search.

• TUNER OPERATION



• TELEVISION OPERATION

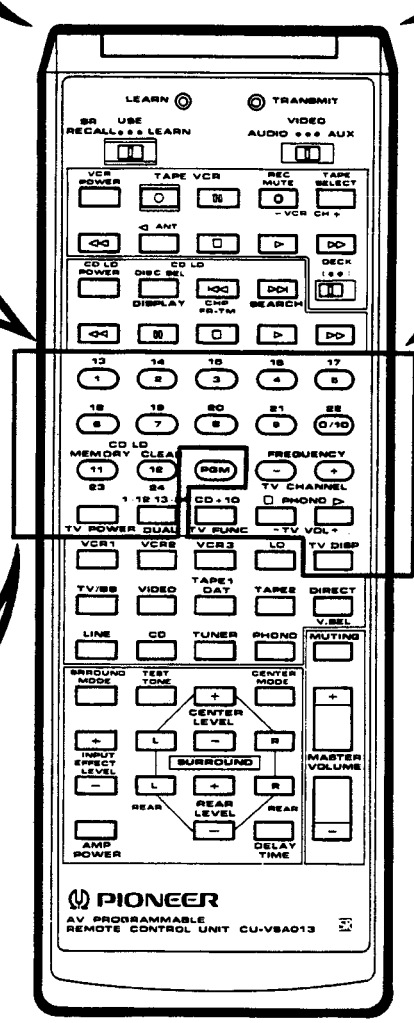


1-12/13-24 (Station Call) button:
Broadcasts memorized in the station call switch can be received directly.

1·12/13·24 (Mode Selector) button:
Switches over between mode 1 (1-12) and mode 2 (13-24). With some tuners this button does not work.

FREQUENCY + (UP) button:
Changes the frequency upward.

FREQUENCY − (DOWN) button:
Changes the frequency downward.



1-12 buttons:
These buttons select the channels.

CHANNEL + (UP) button:
Changes channels in sequence.

CHANNEL − (DOWN) button:
Changes channels in sequence opposite to the + button.

TV POWER button:
Switches the TV power supply to ON/OFF.
The TV POWER button acts the same whether at the AUDIO or the VIDEO position.

DUAL button:
Alternates between MAIN, SAP and MAIN + SAP of audio multiplexed broadcasts. For details, refer the to television handling instructions.

TV FUNC (TV FUNCTION) button:
Switches TV input in sequence.
(This button cannot be used with some televisions.)

TV VOL+,− button:
Increases or lowers the television sound volume.

TV DISP (DISPLAY) button:
Turns the television screen display to ON/OFF.

• TURNTABLE OPERATION

PHONO ► (PLAY) button:
Executes playback.

PHONO ■ (STOP) button:
Stops playback.

• LEANING FUNCTION

The remote control provided with this unit has a learning function.

• What is the learning function?

The remote control learning function is one which enables it to learn and remember the remote control signals for AV equipment by other makers. This function enables remote control not only of audio or video equipment designed for Pioneer remote control but also of audio and video equipment by other makers.

• When the learn function is used:

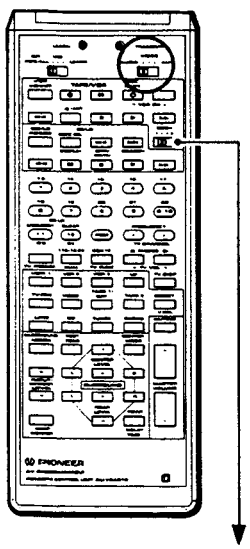
Centralized operation can be executed with one remote control unit for great convenience.

• From what types of remote control can learning be accomplished?

This function is available only for infrared type remote controls. Since almost all of the recent wireless remote controls employ the infrared format, they can be made to learn.
Even if a particular unit is an infrared type remote control, however, if it employs a special format, it might not be able to learn.

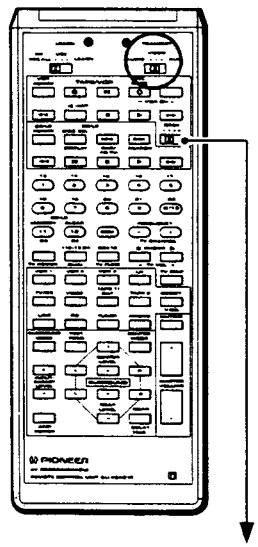
- The unit can be made to learn the action of each button for each mode.

AUDIO mode



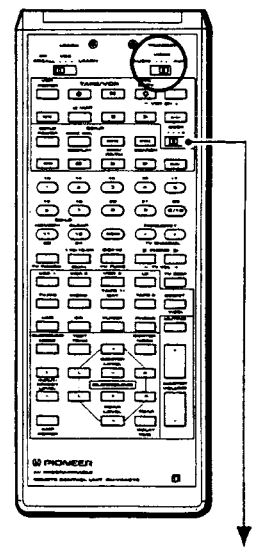
With AUDIO, the TAPE operation button can learn at the side selected for DECK I or DECK II. The other side becomes the same as for all other Pioneer remote controls. (A maximum of 82 buttons can be learned.)

VIDEO mode



In the VIDEO mode, the DECK I/DECK II switch does not operate. (A maximum of 72 buttons can be learned.)

AUX mode



In the AUX mode, the DECK I/DECK II switch does not operate. (A maximum of 72 buttons can be learned.)

CAUTION:

- A programmable remote control can remember the signals from another remote control, but keep the original remote control on hand so that if something learnt is erased accidently, it can be relearned again.
- When making a program, set the unit so that it cannot be operated. Otherwise, if power is engaged, important tape may be erased or loud, sharp sounds may burst forth. In order to render the unit inoperable, turn the main unit power supply to OFF (or remove the power cord from the AC outlet), or cover the remote control sensor. Please note that remote control signals (infrared rays) can be reflected off walls or ceiling and cause operation.

NOTE:

- *When a button with a different name has been learned, write the name or signal of the function learned in pencil on the accessory template and use on the panel for greater convenience.*

• Buttons Which Can Be Learned

All the buttons can made to learn. Once learning has been effected, learning can be effected at the next button (change can be made).

At the AUDIO or VIDEO position, first of all, the uniform Pioneer remote control signals are memorized. If your unit is a Pioneer product, it can now be used. If you want to execute more operations than initially memorized, use the learn function. Moreover, once something has been learned, you can return to the Pioneer uniform remote control signals. (For the return procedure, refer to "Returning to Initial State" on page 38.)

• Contents Which Can Be Learned

Up to about 150 commands comparable to the Pioneer remote control signals can be learned as command contents. A greater number of commands cannot be learned even if there are still buttons which have not learned anything. If you still want to effect learning, you can do so by returning to the initial state, and everything learned thus far will be erased (see page 38).

• Questions (Q) and Answers (A) About the Learn Function

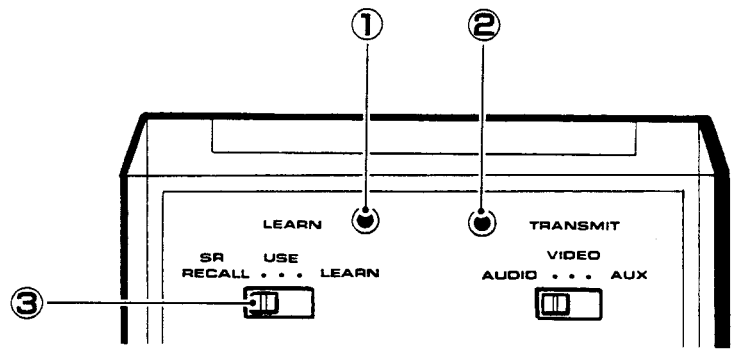
Q: There are two REC buttons on the remote control of my VCR. What is the learning procedure when both of these buttons must be pressed simultaneously before video recording can begin?

A: Press one button (the VCR o button, for instance) of the programmable remote control so that the LEARN indicator lights up, then press two VCR keys simultaneously to make up program.

Q: On the remote control for my VCR there is a REC button and a PLAY button. How do you effect learning when both of these two buttons must be pressed before recording begins?

A: Press one button (the VCR o button, for instance) of the programmable remote control so that the LEARN indicator lights up,then press the REC and PLAY buttons simultaneously to make up the program.

■ If your remote control can be operated by pressing two buttons simultaneously, as referred to above, press the two buttons simultaneously to make up programs.



① Learn Indicator (LEARN)

This indicator lights up or extinguishes so that operation can be effected smoothly after the learn function has been activated.

Illuminated: Status in which learning can be implemented

Extinguished: Regular remote control operation can be conducted.

② Transmit Indicator (TRANSMIT)

This indicator blinks when a remote control signal is being forwarded.

③ LEARN switch

This switch can be changed at the following times.

LEARN: Set to this position to have the signals of your remote control learned and memorized.

USE: Set to this position when memory storage has been completed at the LEARN position. (Set to this position to operate the function learned.)

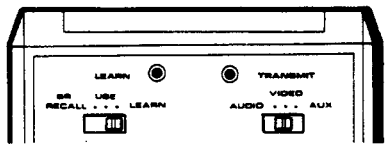
SR RECALL: Set to this position for transmitting Pioneer uniform remote control signals (items displayed on the remote control).

Set the transmission mode switch to AUDIO or VIDEO. Under AUX, only remote control signals of this unit are transmitted.

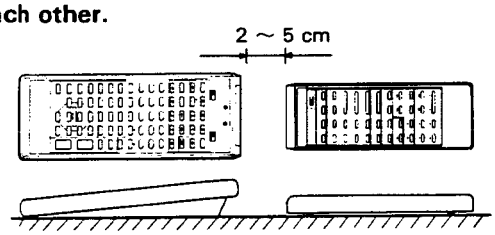
• Learning Procedure

As an example, program the command for playback from your VCR remote control. Before implementing learning, load fresh batteries into both remote controls.

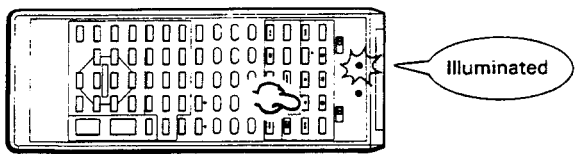
1 Set the left switch to LEARN and the right switch to VIDEO.



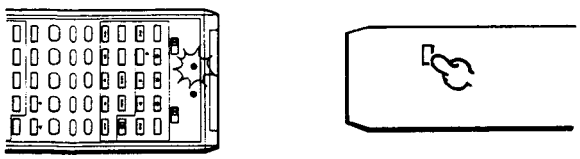
2 Align the transmitters of both controls to face each other.



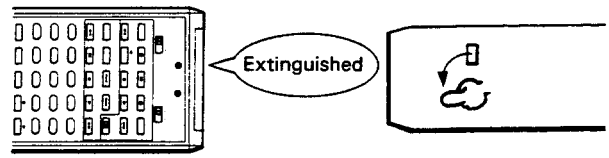
3 Press the VCR playback button of the programmable remote control and hold it depressed until the LEARN indicator lights up.



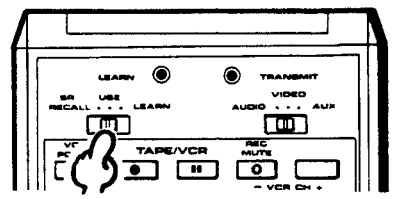
4 Press and hold down the playback button of your VCR remote control.



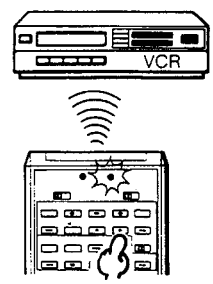
5 When the LEARN indicator of the programmable remote control extinguishes, stop pressing down on the playback button.



6 Set the left switch to USE.



7 Confirm that the VCR can be operated with the programmed button.



8 If the unit does not operate after manipulating remote control ···

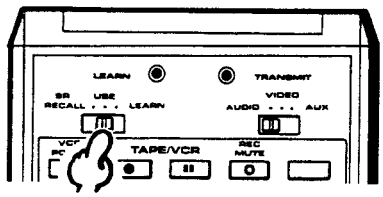
Change the distance, angle or position of the remote control and reprogram buttons which do not operate.

NOTE:

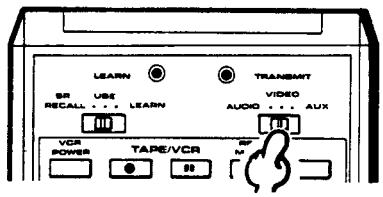
- *If the LEARN indicator blinks, it means that the memory capacity has been overloaded. The last button to undergo programming has not been memorized properly. Since the other buttons programmed thus far have been memorized properly, if the last button does not need to be used, stop programming and use the remote control. All commands other than the last one to be learned can be used as is. If the program contents have been cleared, refer to the procedure for returning to the initial state explained on page 38.*

- **Using a programmed button to operate another unit**

1 Set the left switch to USE.



2 Set the right switch to the same position as during learning.



3 Press and operate each function button.

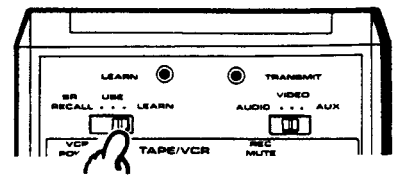
During transmission by remote control, the TRANSMIT indicator blinks.

When operating a Pioneer unit with the mark

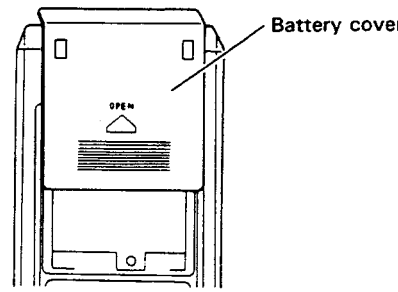
1. **Set the left switch to SR RECALL.**
2. **Select the right switch in accordance with the unit to be operated.**
3. **Press the operation button.**

- **To return to initial state**
  This is the procedure for clearing all memory con-

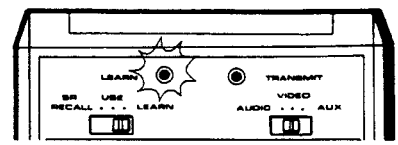
1 Set the left switch to LEARN.



2 Remove the battery cover.

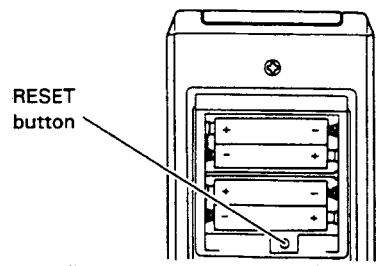


3 Press any button that can be programmed so that the LEARN indicator lights up.



4 Use a ballpoint pen or other pointed object to press the RESET button until the LEARN indicator stops blinking and extinguishes.

- Be careful not to press the button too forcefully.
- All learned contents are erased and the initial state is restored (Pioneer uniform remote control code).



NOTE:

- *Whenever operating a programmed button, always have the left switch at USE. Operation is not possible at other positions.*
- *For functions in which two buttons are pressed simultaneously (i.e., video recording) or functions in which numerous signals are sent at once (i.e,, auto function, program reservation transmission), operational procedures vary and might not be carried out properly.*

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used.
If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Cause	Remedy
Power cannot be supplied.	• The power cord plug is removed from the wall outlet. • The power cord plug has been connected to the outlet of another unit and power supply from that other unit has been cut off.	• Insert plug fully in wall outlet. • Supply power to other unit.
There is no sound	• The MUTING (−∞) button is at ON. • The connecting cord has slipped out from the terminal, it has not been inserted into the terminal fully, or the connection is not correct. • The terminal or pin plug of the connection cord has become dirty. • There has been a mistake in digital/analog switchover. • The input selector has been set for a unit which does not playback.	• Set the MUTING (−∞) button at OFF. • Check the connections. • Wipe away dirt. • Switch the input digital/analog button correctly. • Align with unit that does play back. Or press the input selector of a unit which does play back.
(Cases other than tape 2)	• The TAPE2 monitor is at ON. • The position of the input selector button does not match the unit of playback. that plays back. • Some other unit has not been operated properly.	• Set the button at OFF. • Switch the button properly. • Refer to operating instructions of other unit.
(Case of tape 2)	• The TAPE2 monitor button is at OFF. • The cassette deck has not been operated properly.	• Set the button at ON. • Refer to the operating instructions of the cassette deck.
There is no video output.	• The connection cord has slipped out from the terminal, or the connection was not made properly. • The terminal or pin plug of the connection cord has become dirty. • The position of the input selector button does not match the unit of playback. • Some other unit has not been operated properly.	• Check the connections. • Wipe away dirt. • Switch the button properly. • Refer to the operating instructions of the other unit.
Sound does not come from one speaker	• One of the connection wires or speaker cords has slipped out. • The balance adjustment is skewed to one side.	• Check the connections. • Press the balance buttons simultaneously to establish the central position.
Cannot perform tape recording	• The cassette deck has not been operated properly.	• Refer to the operating instructions of the cassette deck.
Cannot perform tape copying	• The cassette deck has not been operated properly.	• Refer to the operating instructions of the cassette deck.

TROUBLESHOOTING

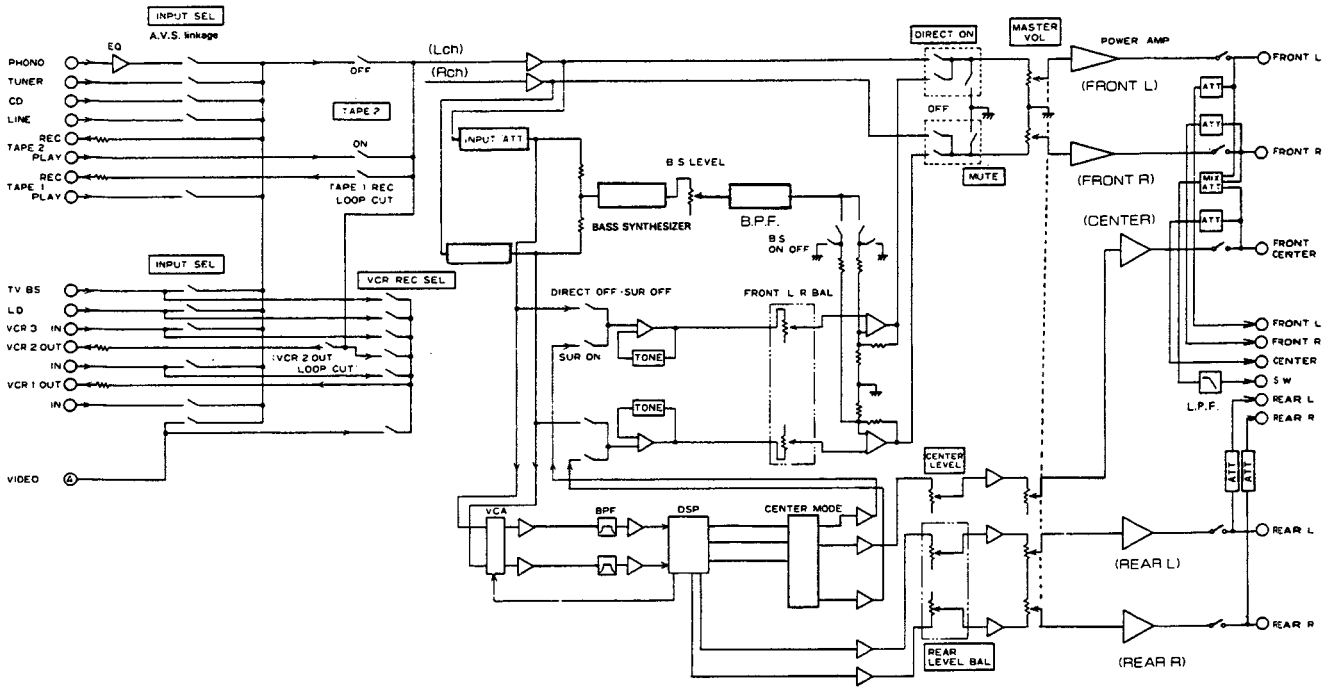
Symptom	Cause	Remedy
Surround cannot be established.	• The Surround button is at OFF. • If the audio input is monaural, a mode other than SIMULATED SURROUND has been set.	• Set the Surround button at ON. • Set SIMULATED SURROUND at ON.
No sound from the center speaker/	• Even though only one center speaker has been connected, the Speaker Selector switch has been set to "I AND II." • Only one center speaker has been connected but it is linked to the II terminal.	• Set the Speaker Selector switch to the "I ONLY" side (page 18). • Connect the speaker to the I terminal.
Remote control does not operate.	• There is no battery in the remote control. Or the battery has gone dead. • The remote control is too far away from the unit. Or else the angle is bad. • There is an obstruction between the remote control and the unit. • There is a fluorescent lamp near the remote control sensor.	• Load battery into remote control. Or replace with fresh battery. • The remote control can be operated when it is within about 7 meters from the unit and its angle with the unit front panel is not more than 30 degrees at right and left. • Change the location of remote control operation or remove the obstruction. • Remove fluorescent lamp from remote control sensor.
(Units sold separately cannot be operated.)	• The remote control cord of the separately sold unit has not been connected.	• Make proper connections (see page 27).

Cases When Indicator Blinks

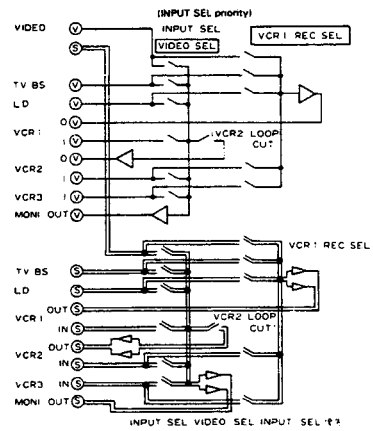
Symptom	Cause	Remedy
Indicator of TAPE2 MONITOR blinks	Input selector was switched while the TAPE2 MONITOR was at ON.	Set the TAPE2 MONITOR at OFF.
DIRECT Indicator blinks	The indicator blinks to give notice that a button which does not function has been pressed while DIRECT is at ON.	

Abnormal functioning of this unit may be caused by lightning, static electricity, or other external interference. To restore normal operation, turn the power off and then on again, or unplug the AC power cord and then plug it in again.

BLOCK DIAGRAM



[VIDEO]



Ⓥ ··· Composite system terminal
Ⓢ ··· S terminal

SPECIFICATIONS

Audio Section

STEREO (FRONT)

Continuous average power output of 75 watts* per channel, min., at 8 ohms, from 20Hz to 20,000Hz with no more than 0.008%* * total harmonic distortion (front).

Continuous power output
- SURROUND
- FRONT (1 kHz, 0.3%, 8Ω) ····· 70W + 70W
- CENTER (1 kHz, 0.3%, 8Ω) ····· 70W
- REAR (1 kHz, 5%, 8Ω) ····· 23W + 23W

Music power (1kHz, 10%, 8Ω)
- STEREO
- FRONT ····· 140W + 140W

Dynamic power output
- 4Ω/8Ω ····· 140W/100W

SN ratio (Old HF=A201, short circuit, A network)
- PHONO MM ····· 72dB
- TUNER, CD, LINE, TAPE1/DAT, TAPE2, VIDEO, TV/BS, LD, VCR1, VCR2, VCR3 ····· 96dB

Input terminal (sensitivity/impedance)
- PHONO MM ····· 2.5mV/50kΩ
- TUNER, CD, LINE, TAPE1/DAT, TAPE2, VIDEO, TV/BS, LD, VCR1, VCR2, VCR3 ····· 150mV/30kΩ

Frequency characteristics
- PHONO MM, 20Hz ~ 20kHz ····· ±0.3dB
- TUNER, CD, LINE, TAPE1/DAT, TAPE2, VIDEO, TV/BS, LD, VCR1, VCR2, VCR3, 5Hz ~ 100kHz ····· $^{+0}_{-3}$dB

Output terminal (output level/impedance)
- TAPE1/DAT, TAPE2, REC ····· 150mV/2.2kΩ
- VCR, VCR3, PRE OUT ····· 150mV/2.2kΩ
- FRONT PRE OUT ····· 1V/2.2kΩ
- SUPER WOOFER OUT ····· 1V/2.2kΩ

Tone Control (Front, Center, Rear)
- BASS ····· ±8dB(100Hz)
- TREBLE ····· ±8dB(10kHz)

Muting ····· −∞

Video Section

Input terminal (sensitivity/impedance)
- VCR1, VCR2, VCR3, LD, TV/BS, VIDEO ····· 1Vp-p/75Ω

Output terminal (sensitivity/impedance)
- VCR1, VCR2,TO MONITOR TV ····· 1Vp-p/75Ω

S terminal (sensitivity/impedance)
- Input terminal
- VCR1, VCR2, VCR3, LD, TV/BS, VIDEO ·····
  1Vp-p/75Ω(luminance signal)
  0.286Vp-p/75Ω(color signal)
- Output terminal
- VCR1, VCR2, TO MONITOR TV ·····
  1Vp-p/75Ω(luminance signal)
  0.286Vp-p/75Ω(color signal)

Frequency characteristics
- VCR1, VCR2, VCR3, LD, VIDEO, TO MONITOR TV, 10Hz ~ 10MHz ····· $^{+0}_{-3}$dB

Surround Section

Surround PRE OUT
- (output level/impedance) ····· 1V/2.2kΩ

Frequency characteristics
- LD → REAR SPEAKER OUT(DOLBY SURROUND position), 30Hz ~ 7kHz ····· $^{+0}_{-3}$dB

Delay time (time of Dolby Pro Logic Surround only)
- Variable range ····· 16ms ~ 30ms
- Step ····· 2ms Step

Power Supply Component, Others

Power requirements ····· AC110/120−127/220/240V (switchable), 50/60Hz

Power consumption ····· 654W

AC outlet
- SWITCHED (x1) ····· 100W MAX

External dimensions ····· 420(W)x427(D)x162(H)mm

Weight ····· 13.8kg

** Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output claims for Amplifier.*

*** Measured by Audio Spectrum Analyzer.*

Accessories

Operating Instructions ····· 1
Remote Control Unit ····· 1
Template ····· 2
Size AAA alkaline dry cell batteries LR03(AM-4) ····· 4

NOTE:
Specifications and the design subject to possible modifications without noice due to improvements.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays and other chemicals on near this unit, since these will corrode the surfaces.